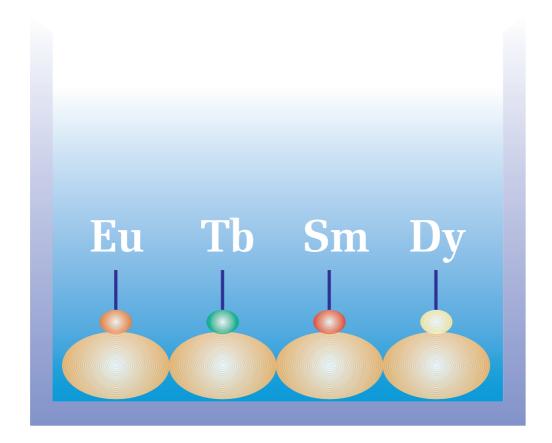
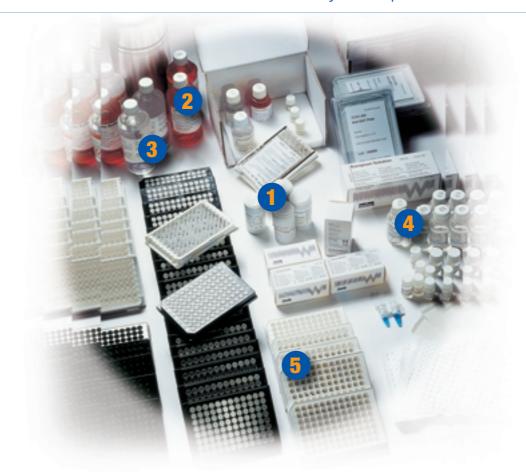
# DELFIA® Research Reagents





# The DELFIA® System for y

The DELFIA® system includes everything you need for sensitive research assays. Reagents, consumables, detection instruments, and PerkinElmer know-how - all are at your disposal.



### Wide application support including technology training

Our application laboratory is focused on meeting today's needs of PerkinElmer customers. Our full program of support includes a flexible and comprehensive training service, tailored to meet the specific needs of each participant. For more information on courses please contact: training.wallac@perkinelmer.com

Technical Support: Wherever you are located in the world, our customer support and service teams are also available to help you. To contact us via e-mail: In Europe: techsupport.europe@perkinelmer.com

In U.S. and rest of the world: techsupport@perkinelmer.com

#### DELFIA lanthanide labeling- and assay services

You can have your own protein labeled, or a peptide or oligonucleotide synthesized with site-specific labeling. We can also help you design and develop your own DELFIA assay in our laboratories. For more information on the custom labeling- or assay service, please contact your local sales representative, or e-mail us either at labellingservices@perkinelmer.com or assayservices@perkinelmer.com

# our application

	Lanthanide-labeled reagents
	You have several options. We offer ready made DELFIA kits with all needed components or you can build your own assay. To do this you can use either DELFIA Eu-labeled secondary reagents or easy-to-use DELFIA labeling reagents that allow you to perform your own labelings.  Protein Binding Assays 10 Ligand-Receptor Binding Assays 12 Cell Cytotoxicity Assays 14 Functional Cell Assays 15 Hybridization Assays 15 Kinase Assays 16 DELFIA Labeling Reagents 17
2	Assay Buffers  A wide range of optimized buffers for various DELFIA assays are available. Or optionally, there are several buffer concentrates to build your own assay.  Assay Buffers
3	Wash Solutions  DELFIA Wash Concentrate is ideal for most of the DELFIA assays. Also available is a specific wash solution for ligand receptor binding assays.  Wash Solutions 20
4	Detection chemistry  Ready made dissociation-enhancement solutions optimized for all DELFIA lanthanide chelates.  Dissociation-Enhancement Solutions
5	DELFIA coated plates are known for their good precision and high sensitivity resulting from high quality coating combined with low fluorescence background plate materials. If you wish to coat your own plates, we offer microplates with a very low fluorescent background, especially designed for DELFIA assays.  Microplates for DELFIA Assays
6	Detection instruments  PerkinElmer offers a range of multilabel reader instruments with a sensitive TRF option.  Detection systems from research to HTS

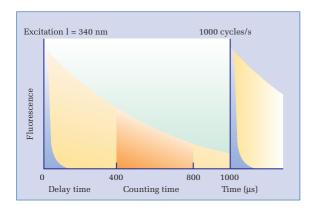
# DELFIA® technology provyou need

Time-resolved fluorometry (TRF) is a well-established technique in drug discovery as well as in other research areas. Providing high sensitivity and wide dynamic range of measurement, the method is characterized by lack of sample interference during measurement and is easy to automate. Based on TRF, the DELFIA® system from PerkinElmer is an optimal tool for confirming hits obtained by high throughput screening, and for ranking them to allow further investigation.

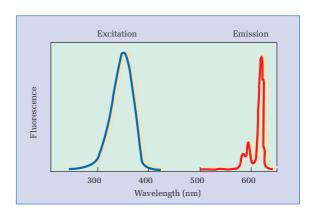
#### How DELFIA® assays work

Fluorometry is the measurement of light emitted, for example, by a labeled sample that has been excited by light at a shorter wavelength. The greater the difference in wavelength between the excitation and emission light (this difference is known as the Stokes' shift) the greater the potential for sensitive measurement of the fluorescence.

Time-resolved fluorometry is possible when the fluorescent label has a long decay time. Light is collected at a time when non-specific fluorescence from the sample matrix and the microplate, etc. has died down. The elimination of interfering background in this way makes a further big contribution towards sensitivity. The DELFIA method exploits the unique fluorescence properties of lanthanide chelate labels. These labels have a long decay time as well as a wide Stokes' shift.



Fluorescence from lanthanide chelates may last up to 200,000 times longer than from convenional fluorophors. This means that the measurement of the fluorescing light can be started relatively late –after non-specific interfering fluorescence has faded away.



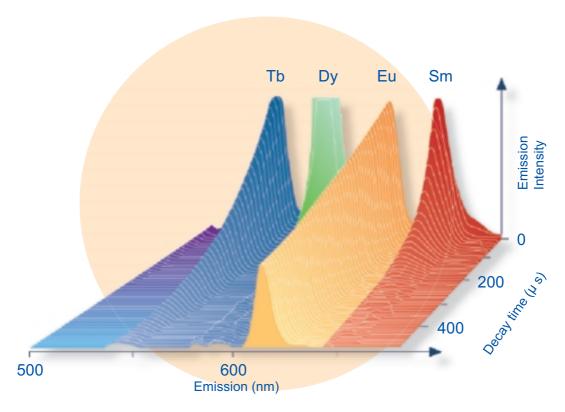
The wavelength of the fluorescence light is very different from that of the light used to excite the chelate. This difference in wavelength is known as the Stokes' shift. A large Stokes' shift gives DELFIA assays the sensitivity they are known for.

# ides you the sensitivity

DELFIA technology is extremely flexible. It suits both 96-well and 384-well plate formats and can be applied in coated plate, in adherent cell and in filter assays. PerkinElmer supplies complete assay kits or just the components you need to create your own sensitive assays. When creating such assays, the labeling procedures are extremely easy. Labeled compounds have a high specific activity and good stability with the label having minimal influence on biological activity. The technology's general robustness and automation friendliness as well as its suitability for multi-analyte assays makes it especially attractive for the hit to lead optimization process.

#### **DELFIA®** allows multiplexing

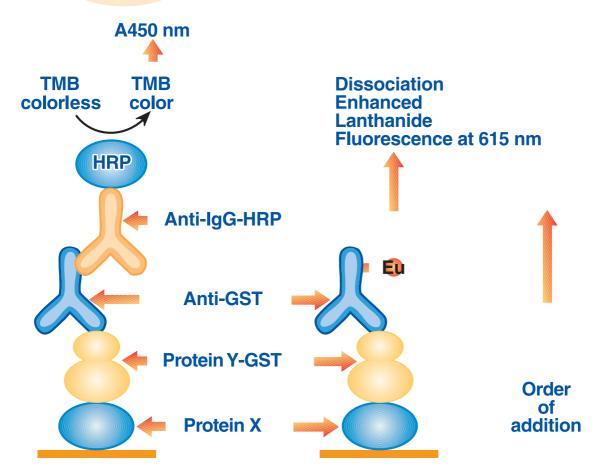
DELFIA assays are separation assays and normally involve an enhancement stage. Apart from allowing extremely sensitive measurement, the method supports multiplexing, since four different lanthanides have mutually distinct fluorescence emission spectra. Simultaneous quantification of two or more analytes in one sample can save time and reduce the volume of samples required.



The chelates have been developed from four lanthanides with spectra clearly distinguishable on the basis of decay time and wavelength. The narrow emission peaks in different wavelengths are 613 nm for europium (Eu), 643 nm for samarium (Sm), 545 nm for terbium (Tb), 572 nm for dysprosium (Dy).

#### More sensitive than traditional ELISA assays

Traditional ELISA (Enzyme Linked Immunosorbent Assay) is widely accepted as the method of choice in drug discovery research. As different from ELISA, DELFIA does not require time-dependent signal detection or addition of stop solution. Combining this benefit with high sensitivity, wide dynamic range and multiplexing capability, makes DELFIA a good alternative to traditional ELISA methods, giving more flexibility to your assay. Existing ELISA assays can easily be transformed into successful DELFIA assays using currently available DELFIA reagents from PerkinElmer. The ease with which ELISA can be converted to DELFIA and the widespread availability of suitable instrumentation has accelerated the switchover to DELFIA assays in recent years.



The simplest DELFIA format uses a generic europium labeled antibody to replace HRP labeled antibodies in ELISA based assays.

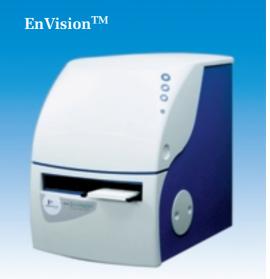
# DELFIA® features and benefits

- Well-proven technology published data from many application areas.
- Figure 3 Gives very high sensitivity enables use of less reagents or detection of smaller quantities of an analyte.
- Multi-label assays possible economical with higher information value.
- Wide dynamic range no need for additional dilutions.
- Reagents are stable for at least one year, giving flexibility in budgeting.
- Stable signal with no requirement for stop solution, giving flexibility to daily planning.

# Detection systems from research to HTS

The measurement of time-resolved fluorescence (TRF) is easily accomplished with multilabel readers that have a TRF option. PerkinElmer has a number of suitable multilabel reader instruments, namely 2100 EnVision<sup>TM</sup>,  $1420 \text{ VICTOR}^{\text{TM}}$ , Fusion<sup>TM</sup> and ViewLux<sup>TM</sup>.





#### $EnVision^{TM}$ , $VICTOR^{TM}$ and $Fusion^{TM}$

Various models of EnVision™, VICTOR™ and Fusion™ are available to meet your specific application needs, and your speed and capacity requirements.

When measuring DELFIA Eu-fluorescence on a 96-well plate, all of these instruments allow a detection limit better than 10 amol Eu/well in a measurement time approximately 2 minutes/plate. With a 384-well plate a detection limit better than 5 amol Eu/well is achieved with reading times of 3, 5 and 8 minutes for EnVision<sup>TM</sup>, VICTOR<sup>TM</sup> and Fusion<sup>TM</sup>, respectively. Based on your sensitivity requirements and throughput needs, EnVision<sup>TM</sup> provides flexibility to run more than 90 000 wells per day.



For ultra-fast processing of 384 well plates the ViewLux<sup>TM</sup>, ultraHTS microplate imager allows detection of all samples on a microplate simultaneously.



# Setting up DELFIA® assays

The usual steps of a DELFIA® assay are binding to a surface, washing and enhancement. This protocol can be considered as a guideline for the development of a protein binding assay.

#### **Solid Phase**

DELFIA assays are separation assays built on e.g. coated microplates or AcroWell™ filtration plates. To enable sensitive assay, microplates should have a low fluorescence background. Such plates are available from PerkinElmer.

#### **Eu-labeled reagents**

As a part of the assay development, serial dilution of the Eu-labeled reagent is recommended. Often in immunoassays, optimal results are gained with antibody concentration of 150-300 ng/mL (1-2 nmol/L).

#### **Assay buffer**

The assay buffer composition plays a critical role in achieving good results in DELFIA assay. To assure good results the use of optimized DELFIA Assay buffers from PerkinElmer is recommended.

#### Washing step

Due to the sensitivity of DELFIA technology the washing procedure needs to be optimized to avoid high background and assay variation. To obtain good reproducible results, optimizing the number of wash cycles, the use of DELFIA Wash Concentrate and automatic plate washes are highly recommended.

#### **Enhancement step**

The europium and samarium fluorescence signal is developed by addition of DELFIA Enhancement Solution. For optimal results, flush the pipette tips or the dispenser tips and tubing thoroughly with DELFIA Enhancement Solution before use. To minimize variation, watch for the air bubbles.

#### Measurement

Measure with a high performance multilabel reader with a time-resolved fluorescence option.

Add e.g. biotinylated protein to streptavidin coated 96-well plate		100 μL (100 ng/mL)
Incubate		1 h slow shaking at RT
Wash		1-2 wash cycles
Add standards and samples		10 μL
Dilute tracer		50-500 ng/mL Eu-labeled protein in Assay Buffer
Add tracer	V	100 - 200 μL
Incubate		1 h slow shaking at RT
Wash		4-6 wash cycles
Enhance	V	200 μL, 5 minutes slow shaking at RT
Measure TR-fluorescence		Eu-fluorescence at 615 nm

# DELFIA® assays offer key benefits in your application area

Application	Advantage	For more information
General	<ul> <li>Well-proven technology</li> <li>High sensitivity</li> <li>Wide dynamic range</li> <li>Multi-label assays possible</li> </ul>	<ul> <li>Advice for setting up robust DELFIA binding assay (1234-979)</li> <li>Multiplexing DELFIA assays using lanthanide-labeled probes (1234-9847)</li> <li>Applications of time-resolved fluorometry with the DELFIA method (1244-1126)</li> <li>DELFIA Buffers Guide (P10978)</li> </ul>
Immunoassays	<ul> <li>Unbeatable sensitivity, dynamic range, and consistency of results</li> <li>More than 1000 scientific references.</li> </ul>	<ul> <li>How to optimize rapid and simple immunoassays (1234-976)</li> <li>DELFIA assays bring convenience in monoclonal antibody development (1234-966)</li> </ul>
Binding assays: Protein-Protein, Protein-Peptide and Protein-DNA	<ul> <li>High sensitivity</li> <li>Selectivity testing using multilabel assays.</li> </ul>	Several published articles
Ligand-Receptor binding assays	<ul> <li>Stabile non-radioactive reagents even for chemokines.</li> <li>Sensitive assay, even membranes with low expression level can be used.</li> <li>Ready made protocols with commercially available receptors.</li> </ul>	-
Kinase assays	High sensitivity, giving savings on costly enzymes.	<ul> <li>DELFIA protein kinase assays (1234-968)</li> <li>Sensitive DELFIA Abl tyrosine kinase assay using poly(Glu, Ala, Tyr) substrate (1234-9844)</li> </ul>
Hybridization assays	<ul> <li>Savings of work and time with multianalyte assays. Optimal for long-term population screening projects.</li> </ul>	• Eu-labelled oligonucleotides are stable and sensitive as probes and primers (1234-965)
Adherent cell assays	<ul><li>Monitor induction of up to three surface antigens in one well.</li><li>Sensitive binding assays</li></ul>	Several published articles
Cell adhesion assays	<ul><li>Non-radiometric</li><li>Sensitive</li></ul>	• Cell adhesion assays (1234-969)
Cell cytotoxicity assays	<ul> <li>Range of sensitive methods to study necrosis, cell proliferation or apoptosis.</li> </ul>	<ul> <li>A new simplified, gentle cell-labelling method for nonradioactive cytotoxicity assays (1234-967)</li> <li>A new cell based DELFIA proliferation assay for measurement of DNA synthesis in microplate format (1234-9866)</li> <li>A new cell-based DNA fragmentation assay for testing apoptotic effect of lead compounds (1234-9864)</li> <li>A DELFIA assay for inhibition of PARP (1234-9865)</li> </ul>
Functional cell assays	Non-radiometric, sensitive Eu-GTP binding kit.	<ul> <li>A simple, more HTS-friendly DELFIA time-resolved fluorescence assay for cAMP determination (1234-9859)</li> <li>Time-resolved fluorescence-based GTP binding assay for G-Protein coupled receptors (1234-9858)</li> </ul>

 $Visit\ our\ website\ to\ download\ electronic\ versions\ of\ available\ literature\ in\ PDF\ format.\ {\bf www.perkinelmer.com/delfia}$ 



### Protein Binding Assays

Setting up a sensitive binding assay is easy with our lanthanide labeled reagents binding to tagged proteins, peptides or other biomolecules.

#### Streptavidin

Isolated from fermentation filtrates of *Streptomyces avidinii*, 1 mg of streptavidin binds approximately 10 µg of biotin. As a guideline, a final concentration of 50-100 ng/mL of europium labeled streptavidin is usually ideal for the generation of a suitable assay signal. Europium (Eu), samarium (Sm) and terbium (Tb) labeled streptavidin are supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

#### Protein G

Protein G is a recombinant form of Protein G cloned from *Streptococcus spp*. and produced in *E.coli*. Protein G binds to the Fc region of IgG by a non-immune mechanism, which is similar to that of Protein A, but has a broader binding range and higher binding affinity. Protein G binds to all subclasses of human IgG and mouse IgG. In addition it binds to rat, goat, sheep, guinea pig, rabbit, cow, pig and horse antibodies. It does not bind to chicken or cat antibodies, and binds weakly to IgG from dog. Protein G does not bind to human IgA, IgM or serum albumin. The europium labeled Protein G is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-labeled protein G	250 μg	1244-361

#### Anti-mouse antibody

The antibody is an affinity purified polyclonal rabbit antibody which reacts with all mouse IgG subclasses. The reaction with IgG1, IgG2a and IgG2b is somewhat stronger than the reaction with IgG3. The antibody also reacts with mouse IgA and IgM. Cross-reaction with human immunoglobulins is less than 0.2%, with fetal calf serum less than 0.1% and with rat serum and rat IgG less than 3%. Cross-reaction with goat, guinea pig, ox and swine immunoglobulins is less than 1.5% when determined with ELISA. The europium labeled anti-mouse antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-mouse antibody	50 μg	AD0124
DELFIA Eu-N1 labeled anti-mouse antibody	1 mg	AD0207

#### Anti-rabbit antibody

The antibody is an affinity purified polyclonal goat antibody and it reacts with all classes of rabbit immunoglobulins. Cross-reaction with human and mouse immunoglobulins is less than 0.7%, with ox, rat and swine immunoglobulins and fetal calf serum less than 0.1%, and with guinea pig immunoglobulins about 20% when determined with ELISA. The europium labeled anti-rabbit antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-rabbit antibody	200 μg	AD0105
DELFIA Eu-N1 labeled anti-rabbit antibody	1 mg	AD0106

#### Anti-human antibody

The antibody is made from *in vitro* produced and affinity purified mouse monoclonal IgG2b antibody specific for the Fc-part of human IgG. The antibodies recognize all IgG subclasses and cross-react with rabbit immunoglobulins. As a guideline, a final concentration around 100 ng/mL of the europium labeled anti-human antibody is adequate for generation of the assay signal. The europium labeled anti-human antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-labeled anti-human IgG	100 μg	1244-330

#### Anti-HA antibody

The anti-HA antibody is a purified IgG2b subclass of mouse monoclonal antibody. It recognizes the epitope sequence (YPYDVPDYA) derived from the human influenza hemagglutinin (HA) protein. The europium labeled anti-HA antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-HA antibody	1 mg	AD0053
DELFIA Eu-N1 labeled anti-HA antibody	50 μg	AD0054

#### Anti-6xHis antibody

The anti-6xHis antibody is a purified mouse IgG1 monoclonal antibody. The monoclonal 6xHis antibody is raised against a polypeptide containing a 6x histidine tag. The antibody has been shown to detect polyhistidine tags localized at the amino- or carboxyl-terminus. The europium labeled anti-6xHis antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-6xHis antibody	50 μg	AD0108
DELFIA Eu-N1 labeled anti-6xHis antibody	1 mg	AD0109

#### Anti-c-myc antibody

The anti-c-myc antibody is a purified mouse IgG1 monoclonal antibody. It recognizes the epitope sequence (EQKLISEEDL), which was derived from the human c-myc protein. The monoclonal antibody against the c-myc epitope does not cross-react with other cellular proteins. The europium labeled anti-c-myc antibody is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-c-myc antibody	50 μg	AD0112
DELFIA Eu-N1 labeled anti-c-myc antibody	1 mg	AD0113

#### Anti-GST antibody

To order europium labeled anti-GST antibody please contact your local sales representative, or e-mail us at labellingservices@perkinelmer.com

# Ligand-Receptor Binding Assays

The DELFIA Eu-labeled ligand family offers stable reagents for non-radioactive ligand-receptor binding assays. The binding assay with the receptor membrane can be done in an AcroWell filter plate. After incubation unbound labeled ligand is removed by filtration followed by enhancement using DELFIA Enhancement Solution. DELFIA Eu-labeled ligands are compatible with PerkinElmer membrane receptors. For easy assay set-up we offer DELFIA L\*R wash solution and DELFIA L\*R binding buffer (see Assay Buffers on page 20, for more information).

#### DELFIA Eu-labeled bombesin

DELFIA Eu-labeled bombesin is a synthetic peptide amide, similar to amphibian bombesin with a europium chelate coupled to the amino end of the peptide. The sequence of DELFIA Eu-labeled bombesin is the following: Ac-Eu<sup>3+</sup>-Ahx-PQRLGNQWAVGHLM-NH<sub>2</sub>.

Type of product	Amount	Part No.
DELFIA Eu-labeled bombesin	150 pmol	AD0227
DELFIA Eu-labeled bombesin	600 pmol	AD0228

#### DELFIA Eu-labeled EGF

DELFIA Eu-labeled EGF is a recombinant human protein with a europium chelate coupled to the amino end of the protein. The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled EGF	350 pmol	AD0217
DELFIA Eu-labeled EGF	1400 pmol	AD0218

#### DELFIA Eu-labeled galanin

DELFIA Eu-labeled galanin is a synthetic human galanin peptide with a europium chelate coupled to the amino end of the peptide. The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled galanin	200 pmol	AD0215
DELFIA Eu-labeled galanin	850 pmol	AD0216

#### DELFIA Eu-labeled interleukin-8

DELFIA Eu-labeled interleukin-8 is a recombinant human protein (72 amino acid form) with a europium chelate coupled to the amino end of the protein. The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled interleukin-8	160 pmol	AD0213
DELFIA Eu-labeled interleukin-8	700 pmol	AD0214

#### DELFIA Eu-labeled motilin

DELFIA Eu-labeled motilin is a synthetic peptide amide, similar to human or porcine motilin, with a europium chelate coupled to the carboxyl end of the peptide. The sequence of DELFIA Eu-labeled motilin is the following: H-FVPIFTYGELQRMQEKERNKGQ-Eu<sup>3+</sup>-NH<sub>2</sub>. The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled motilin	60 pmol	AD0208
DELFIA Eu-labeled motilin	240 pmol	AD0209

#### DELFIA Eu-labeled NDP-αMSH

DELFIA Eu-labeled NDP- $\alpha$ MSH is a synthetic peptide amide, analog of  $\alpha$ MSH, with a europium chelate coupled to the carboxyl end of the peptide. The sequence of DELFIA Eu-labeled NDP- $\alpha$ MSH is the following: Ac-SYS-Nle-EH(D)FRWGKPV-Eu<sup>3+</sup>-NH<sub>2</sub>.

Type of product	Amount	Part No.
DELFIA Eu-labeled NDP-αMSH	200 pmol	AD0225
DELFIA Eu-labeled NDP-αMSH	800 pmol	AD0226

#### DELFIA Eu-labeled neurotensin

DELFIA Eu-labeled neurotensin is a synthetic peptide, similar to human neurotensin with a europium chelate coupled to the amino end of the peptide. The sequence of DELFIA Eu-labeled neurotensin is the following: Ac-Eu<sup>3+</sup>-ELTENKPRRPYIL-OH. The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled neurotensin	200 pmol	AD0219
DELFIA Eu-labeled neurotensin	750 pmol	AD0220

#### DELFIA Eu-labeled neurokinin A

DELFIA Eu-labeled neurokinin A is a synthetic peptide amide, similar to human neurokinin A with a europium chelate coupled to the amino end of the peptide. The sequence of DELFIA Eu-labeled neurokinin A is the following:  $H-Eu^3+-HKTDSFVGLM-NH_2$ . The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled neurokinin A	300 pmol	AD0221
DELFIA Eu-labeled neurokinin A	1200 pmol	AD0222

#### DELFIA Eu-labeled substance P

DELFIA Eu-labeled substance P is a synthetic peptide amide, similar to human substance P with a europium chelate coupled to the amino end of the peptide. The sequence of DELFIA Eu-labeled substance P is the following:  $H-Eu^3+-RPKPQQFFGLM-NH_2$ . The products are supplied lyophilized.

Type of product	Amount	Part No.
DELFIA Eu-labeled substance P	200 pmol	AD0223
DELFIA Eu-labeled substance P	800 pmol	AD0224

#### DELFIA Eu-labeled TNFα

DELFIA Eu-labeled TNF $\alpha$  is a recombinant human protein with a europium chelate coupled to the amino end and/or lysine groups of the protein. The Eu-labeled TNF $\alpha$  is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-labeled TNFα	600 pmol	CR400-600

#### DELFIA Eu-labeled interleukin-2

DELFIA Eu-labeled interleukin-2 is a recombinant human protein with a europium chelate coupled to the amino end and/or lysine groups of the protein. The product is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-labeled interleukin-2	650 pmol	CR401-650

#### DELFIA Eu-labeled interleukin-5

DELFIA Eu-labeled interleukin-5 is a recombinant human protein with a europium chelate coupled to the amino end and/or lysine groups of the protein. The product is supplied ready for use in 50 mmol/L Tris-HCl buffered salt solution.

Type of product	Amount	Part No.
DELFIA Eu-labeled interleukin-5	400 pmol	CR402-400

## Cell Cytotoxicity Assays

#### Cell proliferation kit

Cell proliferation is an important parameter when studying live cell function, especially when the effect of growth regulatory substances or cytotoxic agents is under study. Since cellular proliferation requires the replication of cellular DNA, methods based on DNA synthesis measurement can be used as an accurate indicator of cell growth. A non-isotopic alternative for <sup>3</sup>H-thymidine is BrdU, a pyrimidine analog, which can be incorporated into newly synthesized DNA instead of thymidine.

Intended for the rapid and simple assay of cytotoxicity or proliferation of mammalian cells and cell lines in culture (adherent and suspension cells), the DELFIA Cell Proliferation kit is a non-isotopic immunoassay based on the measurement of 5-bromo-2'-deoxyuridine (BrdU) incorporation during DNA synthesis in proliferating cells. As is characteristic for DELFIA technology, the fluorescent signal is stable and requires no addition of stop solution. The kit can be used for the direct assessment of cell numbers, and also for assaying cytotoxic effects on cultured cells as an endpoint measurement. The kit contains the following components, which are sufficient for  $10 \times 96$  wells:

- BrdU Labeling Reagent
- Anti-BrdU-Eu
- Fix Solution
- DELFIA Wash Concentrate
- DELFIA Assay Buffer
- DELFIA Inducer

Also required, but not supplied as part of the kit are tissue culture treated white 96-well microplates with clear and flat bottom, e.g. Isoplate $^{TM}$  (cat. no. 1450-517) or ViewPlate $^{TM}$  (cat. no. 6005181)

Type of product	Amount	Part No.
DELFIA Cell proliferation kit	960 assays	AD0200

#### Cytotoxicity reagents

DELFIA cytotoxicity assays offer a non-radioactive method to be used in cell mediated cytotoxicity studies. The assay principle is similar to the radioactive chromium release assay, and the method is equally sensitive.

DELFIA BATDA Reagent based assay is more suitable for fragile cell lines. The method is based on loading cells with an acetoxymethyl ester of a fluorescence enhancing ligand. After the ligand has penetrated the cell membrane the ester bonds are hydrolyzed within the cell to form a hydrophilic ligand, which no longer passes through the membrane. After cytolysis the released ligand is introduced to a europium solution to form a fluorescent chelate. The measured signal correlates directly with the amount of lysed cells. The longest recommended reaction time for this method is 4 hours. The kit (AD0116) contains the following components, which are sufficient for  $10 \times 96$  wells:

- BATDA Reagent for labeling of cells
- Lysis Buffer
- Europium Solution
- DELFIA microtitration plates (10 x 96 wells)

Type of product	Amount	Part No.
DELFIA EuTDA cytotoxicity reagents	10*96 wells	AD0116

Reagents for the assay are also available separately. The Lysis buffer is used for the determination of the maximum release. It can also be used in cell based TruPoint<sup>TM</sup> Caspase assays. The individually available DELFIA Eu-solution and the BATDA ligand are both sufficient for 10 x 96 wells.

Type of product	Amount	Part No.
Lysis buffer	30 mL	4005-0010
DELFIA Eu-solution	200 mL	C135-100
DELFIA BATDA labeling reagent	50 μL	C136-100

## Functional Cell Assays

#### DELFIA GTP-binding kit

This DELFIA GTP-binding kit is intended for the measurement of G-protein coupled receptor activation in membrane preparations. The DELFIA GTP-binding assay is based on GDP-GTP exchange on G-protein subunits followed by GPCR activation by agonists. There are thorough instructions and tools provided in the kit to optimize the assay for the membrane receptor of your interest. The kit contains the following components, which are sufficient for  $10 \times 96$  wells:

- GTP-Eu
- GTP-γ-S
- GDP
- ► HEPES Buffer (pH 7.4)
- > 10x GTP Wash Solution

- Saponin
- ▶ MgCl₂ solution
- NaCl solution
- AcroWell Filter Plates (10 x 96 wells)

The DELFIA GTP-binding kit's novel GTP-Eu-label is fluorescent and non-hydrolyzable, enabling the simple and robust monitor of the agonist-dependent activation of G-proteins without the addition of Enhancement Solution. The europium-labeled GTP is also available separately as a bulk reagent (for 100 x 96 wells), supplied lyophilized.

Type of product	Amount	Part No.
DELFIA GTP-binding kit	$10 \times 96$ wells	AD0167
DELFIA GTP-Eu	10 x 1.65 nmol	CR132-100

#### DELFIA cAMP kit

The DELFIA cAMP kit is intended for the quantitative determination of adenosine-3',5'-cyclic monophospate (cAMP) in cell culture samples requiring high sensitivity. The DELFIA cAMP assay has low cross-reactivity to other cyclic and non-cyclic nucleotides such as ATP and cGMP. The kits contain the following components:

- cAMP Standard
- cAMP-Eu tracer
- Mari-cAMP Serum
- Lysis Buffer
- cAMP Buffer for Standards
- Triethvlamine

- Acetic Anhydride
- DELFIA Wash Concentrate
- DELFIA Assay Buffer
- DELFIA Enhancement Solution
- DELFIA Anti-rabbit coated plates

The DELFIA cAMP assay can be run with three different protocols - basic, simple, and high sensitivity. The basic and high sensitivity protocols involve adherent cells. In the simple protocol the determination is from cells in suspension, and all the steps from sample preparation to measurement of fluorescence are performed on a DELFIA plate.

The sensitivity of the DELFIA cAMP 384 kit is at least 0.28 pmol/well (7.1 nmol/L) when using the simple assay protocol. When using the high sensitivity protocol the sensitivity is at least 0.28 fmol/well (7.1 pmol/L).

Type of product	Amount	Part No.
DELFIA cAMP kit	2 x 96 wells	CR89-102
DELFIA cAMP Kit	$10 \times 96$ wells	4003-0010
DELFIA cAMP 384 kit	$2 \times 384$ wells	CR92-102
DELFIA cAMP 384 kit	$10 \times 384$ wells	4004-0010
DELFIA cAMP Kit DELFIA cAMP 384 kit	10 x 96 wells 2 x 384 wells	4003-0010 CR92-102

## Hybridization Assays

A simple and user friendly method for detection of gene mutations or viruses in routine laboratories can be designed using Eu-labeled oligonucleotides. We have products available for Type 1 Diabetes and Celiac Disease hybridization assays. Dual or even triple-label assays can be set up using DELFIA® technology to include an internal control for the sample or increase throughput of the assay. Streptavidin coated DELFIA plates as solid phase eliminate laborious sample preparation and electrophoresis procedures. For more information about the oligonucleotide synthesis- and labeling service, please contact your local sales representative, or e-mail us at

labellingservices@perkinelmer.com

### Kinase Assays

Protein phosphorylation is a basic mechanism for the modification of protein function in eukaryotic cells. Protein kinases use ATP to phophorylate certain amino acid residues (tyrosine, serine or threonine) on their substrates. DELFIA reagents can be used to detect both phosphorylated peptides and proteins.

#### DELFIA Tyrosine Kinase kit

The DELFIA Tyrosine Kinase assay kit includes the reagents needed for determination of tyrosine kinase activity. The reagents are also available separately. The kit contains the following components, which are sufficient for 2 x 96 wells:

#### Product numbers to order separately

- DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PT66) ....... AD0040 (50 μg), AD0041 (1 mg)

- ▶ DELFIA Streptavidin-coated clear plate, 8 x 12 strips (2 plates) ...... 4009-0010 (10 plates)
- Biotinylated poly(Glu,Ala,Tyr) Substrate
- Positive control

First the enzyme assay is carried out normally using the biotinylated substrate supplied, then the reaction solution is diluted and transferred to a streptavidin plate. An antibody against phosphorylated tyrosine binds to the phosphorylated substrate. The positive control (biotinylated phosphopeptide) is included to allow for testing of the assay procedure.

Type of product	Amount	Part No.
DELFIA Tyrosine Kinase kit	2 x 96 wells	AD0122

#### Anti-phosphotyrosine antibody

The P-Tyr-100, PT66, and PY20 antibodies are affinity purified mouse monoclonal antibodies, that bind to phosphorylated tyrosine residues. The P-Tyr-100 antibody (supplied by Cell Signaling Technology) is particularly effective in recognizing a wide range of peptide sequences.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (P-Tyr-100)	50 μg	AD0159
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (P-Tyr-100)	1 mg	AD0160
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PY20)	50 μg	AD0038
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PY20)	1 mg	AD0039
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PT66)	50 μg	AD0040
DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PT66)	1 mg	AD0041

#### Anti-phosphothreonine antibody

The antibody is an affinity-purified rabbit polyclonal IgG (supplied by Cell Signaling Technology).

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-phosphothreonine antibody	10 μg	AD0092

#### Anti-phospho-Akt substrate antibody

Phospho-Akt substrate antibody (supplied by Cell Signaling Technology) is an affinity-purified rabbit polyclonal antibody. It is highly specific for phosphorylated threonine preceded by arginine at position -5 and -3. Some cross-reactivity is observed for phosphoserine with arginine at positions -5 and -3 or -3 and -2.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-phospho-Akt substrate antibody	10 μg	AD0183

#### Anti-phosphoserine antibody

Phosphoserine antibody is an affinity-purified rabbit polyclonal antibody. It reacts specifically with proteins containing phosphorylated serine residues. Recognition of proteins containing phosphorylated serine by this antibody is independent of neighboring amino acids and species of origin of the phosphorylated protein. This antibody is specific for phosphoserine containing proteins and shows no significant cross-reactivity to proteins phosphorylated on threonine or tyrosine residues.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-phosphoserine antibody	10 μg	AD0185

#### Anti-phospho-(Ser) 14-3-3 motif antibody

Anti-phospho-(Ser) 14-3-3 motif antibody (supplied by Cell Signaling Technology) is an affinity-purified rabbit polyclonal antibody. It detects phosphorylated 14-3-3 binding proteins which contain phosphorylated serine surrounded by proline at the +2 position and arginine or lysine at the -3 position. It weakly cross-reacts when phospho-threonine replaces phospho-serine in this motif. The antibody also recognizes the motif containing phospho-serine surrounded by phenylalanine at the +1 position and arginine at the -3 position. Binding is phospho-specific and largely independent of the surrounding amino acid sequence.

Type of product	Amount	Part No.
DELFIA Eu-N1 labeled anti-phospho-(Ser) 14-3-3 motif antibod	y 10 μg	AD0189

#### Anti-phosphoserine/threonine test service

A selection of Eu-labeled anti-phosphoserine/threonine antibodies are available via PerkinElmer Assay Services. A specificity test of the Eu-labeled antibody against the customer's substrate is performed with 11 different antibodies by PerkinElmer. For more information please contact us at assayservices@perkinelmer.com

Secondary antibodies such as Eu-N1 labeled anti-rabbit and anti-mouse antibodies can be used together with unlabeled primary anti-phosphoserine antibody to set up DELFIA assays for specific serine/threonine kinases.

# DELFIA® Labeling Reagents

#### N1 chelates

The most commonly used chelate is the N1 chelate. It allows easy labeling and purification, as well as fast dissociation. N1 chelate is best suited in separation assays where the concentration of chelating agents, such as EDTA, DTPA or citrates, is less than 0.05 mmol/L, where pH is greater than 7 and the assay temperature is not more than 38°C.

#### DTPA chelates

If stability problems are encountered using N1 chelates, or when assay conditions are more extreme DTPA chelates provide a better alternative. The DTPA chelates can be used in DELFIA separation assays where the concentration of chelating agents is between 0.05 and 10 mmol/L. They also support lower pH values, down to pH 6.5, and assay temperatures as high as  $70^{\circ}$ C.

#### Labeling kits

DELFIA Labeling kits are intended for labeling of free amino groups on proteins with europium ( $Eu^{3+}$ ) or samarium ( $Sm^{3+}$ ) for use in DELFIA assays. One kit is sufficient for labeling up to 1 mg of protein and contains:

- Labeling Reagent (0,2 mg)
- Eu/Sm standard
- Stabilizer
- Uncoated microplate

- DELFIA Enhancement Solution
- DELFIA Assay Buffer
- DELFIA Wash Concentrate

Type of product	Amount	Part No.
DELFIA Eu-Labeling kit (Eu-N1 ITC chelate)	0.2 mg	1244-302
DELFIA Sm-Labeling kit (Sm-N1 ITC chelate)	0.2 mg	1244-303

#### Labeling at free amino groups

Isothiocyanate (ITC) activated chelates react primarily with free amino groups on the compound to be labeled.

Type of product	Amount	Part No.
DELFIA Eu-Labeling reagent (Eu-N1 ITC chelate & Eu standard)	1 mg (for labeling up to 5 mg of protein)	1244-301
DELFIA Eu-N1 ITC chelate & Eu standard	20 mg	AD0001
DELFIA Sm-N1 ITC chelate & Sm standard	1 mg	AD0005
DELFIA Tb-N1 ITC chelate & Tb standard	1 mg	AD0009
DELFIA Eu-DTPA ITC chelate & Eu standard	1 mg	AD0021
DELFIA Sm-DTPA ITC chelate & Sm standard	1 mg	AD0025
DELFIA Tb-DTPA ITC chelate & Tb standard	1 mg	AD0029

#### Labeling at thiol groups

Iodoacetamido-activated chelates react with free sulfhydryl groups on peptides and proteins forming stable covalent thioether bonds.

Type of product	Amount	Part No.
DELFIA Eu-N1 iodoacetamido chelate & Eu standard	1 mg	AD0002
DELFIA Sm-N1 iodoacetamido chelate & Sm standard	1 mg	AD0006
DELFIA Tb-N1 iodoacetamido chelate & Tb standard	1 mg	AD0010
DELFIA Eu-DTPA iodoacetamido chelate & Eu standard	1 mg	AD0022

#### Labeling at carboxyl groups

Amino chelates react with carboxyl groups on the compound to be labeled in the presence of carbodiimides.

Type of product	Amount	Part No.
DELFIA Eu-N1 amino chelate & Eu standard	1 mg	AD0003
DELFIA Eu-DTPA amino chelate & Eu standard	1 mg	AD0023

#### Universal labeling

Dichlorotriazine-activated (DTA) chelates are suitable for labeling proteins, peptides, nucleic acids and small molecules containing amino, hydroxy and mercapto groups.

Type of product	Amount	Part No.
DELFIA Eu-N1 DTA chelate & Eu standard	1 mg	AD0004
DELFIA Sm-N1 DTA chelate & Sm standard	1 mg	AD0008
DELFIA Tb-N1 DTA chelate & Tb standard	1 mg	AD0012
DELFIA Eu-DTPA DTA chelate & Eu standard	1 mg	AD0024

# Microplates for DELFIA® Assays

#### Filter plate for DELFIA assay

AcroWell Filter Plates are recommended for DELFIA filtration assays. The plates consist of two parts, a clear polystyrene lid and a chemically resistant and biologically inert polypropylene filter plate assembly. Two membrane layers are sealed to the bottom of each plate using a patented process, which minimizes the well-to-well crosstalk. The plates are stackable and fit most standard vacuum manifolds. AcroWell filtration plates have a uniquely low fluorescence background and are therefore well suited for DELFIA assays, particularly for DELFIA ligand-receptor binding assays, and DELFIA GTP binding assays.

Type of product	Amount	Part No.
AcroWell filter plate, 96-well, pore size 0.45 μm	10 plates	5020

#### Plates for DELFIA coatings

High binding polystyrene plates are recommended for DELFIA coatings. Due to irradiation, the polystyrene well surface is hydrophobic and slightly ionic enabling the binding interaction by passive adsorption through both hydrophobic and ionic interactions. The binding capacity of a high binding surface is typically 800 to 1000 ng IgG per 200  $\mu$ L.

DELFIA Microtitration plates are manufactured from carefully selected plastic material with low fluorescence background. To fulfill different assay needs, both solid and strip format plates are supplied.

DELFIA Yellow plates have a high protein binding capacity combined with exceptionally low fluorescence background. The lower background and, hence, increased sensitivity result from a UV-absorbing agent in the plastic material that prevents the excitation of the plastic. The properties of the yellow plate are especially beneficial in multi-analyte DELFIA assays where samarium or terbium is used as a second label alongside europium.

Type of product	Amount	Part No.
DELFIA Microtitration Plate, 8 x 12 strips, clear plate	60 plates	1244-550
DELFIA Yellow Plate, 96-well	60 plates	AAAND-0001

#### **DELFIA** coated microplates

A variety of DELFIA coated plates are available as catalog items. These are based on our proven low fluorescence background plates, and all coating procedures are tested and optimized to give high sensitivity and good precision in DELFIA assays.

Both 96 and 384-well format plates are supplied to fulfill different throughput needs. The 8 x 12 strip format plate offers maximum flexibility when just part of the plate is used at a time. The 96-well plates are coated with a volume of 200  $\mu$ L and the 384-well plates with a volume of 60  $\mu$ L. Plates are saturated with BSA. All plates are in a ready-to-use dry format and do not require any pretreatment.

Streptavidin coated DELFIA plates bind all biotinylated biomolecules; e.g. peptides, proteins, antibodies, and haptens. Anti-mouse antibody coated DELFIA plates are based on an anti-mouse antibody raised in rabbit and reacting with all mouse IgG subclasses, IgA and IgM. Reaction with human serum and fetal calf serum is less than 0.1%. Corresponding products, anti-rabbit and anti-sheep antibody coated DELFIA plates are also available. Both anti-rabbit- and anti-sheep-antibodies are raised in goat.

Type of product	Amount	Part No.	
DELFIA Streptavidin-coated yellow plate, 96-well	10 plates	AAAND-0005	
DELFIA Streptavidin-coated clear plate, 8 x 12 strips	10 plates	4009-0010	
DELFIA Streptavidin-coated white plate, 384-well	10 plates	CC11-H10	
DELFIA Anti-mouse-coated yellow plate, 96-well	10 plates	AAAND-0003	
DELFIA Anti-mouse-coated clear plate, 8 x 12 strips	10 plates	4007-0010	
DELFIA Anti-mouse-coated white plate, 384-well	10 plates	CC31-H10	
DELFIA Anti-rabbit-coated yellow plate, 96-well	10 plates	AAAND-0004	
DELFIA Anti-rabbit-coated clear plate, 8 x 12 strips	10 plates	4008-0010	
DELFIA Anti-rabbit-coated white plate, 384-well	10 plates	CC32-H10	
DELFIA Anti-sheep-coated yellow plate, 96-well	10 plates	CC33-1210	
DELFIA Anti-sheep-coated white plate, 384-well	10 plates	CC33-H10	

# **Assay Buffers**

We offer as catalog items a number of buffers, optimized to give a minimum non-specific binding and low fluorescence background in DELFIA assay. Ready-to-use buffers and buffer concentrates are available in different bottle sizes. 50 mL of a ready-to-use solution is sufficient for 250 wells of a standard 96-well plate.

To achieve the best results in a DELFIA assay, the optimal buffer composition should be chosen.

Buffer	Description	Recommended application
DELFIA Assay Buffer. Ready to use	Tris-HCl buffered (pH 7.8) salt solution with BSA, bovine globulin, Tween 40, DTPA, an inert red dye, and < 0.1% sodium azide as preservative	Immunoassays, Binding assays
DELFIA Assay Buffer w/o detergents. 5X concentrate	Tris-HCl buffered (pH 7.8) salt solution with DTPA, BSA and bovine gamma globulin	Cell based assays, assays where detergents may interfere
DELFIA L*R Binding Buffer. 10X concentrate	Tris-HCl buffered (pH 7.5) salt solution with BSA, EDTA and ${\rm MgCl}_2$	Ligand-Receptor binding assays
DELFIA Research Buffer Set. 2X concentrate	In separate bottles: Tris-HCl buffered salt solution with DTPA (2X conc), detergent (Tween 40) and BSA	Basic buffer for your own optimization
Hybridization Buffer	Tris-HCl buffered solution (pH 7.8) containing 1 mol/L NaCl < 0.1% sodium azide, BSA, bovine gamma globulins, Tween 20, DTPA and an inert red dye	Hybridization assays

Type of product	Amount	Part No.
DELFIA Assay Buffer	50 mL	1244-106
DELFIA Assay Buffer	$250~\mathrm{mL}$	1244-111
DELFIA Assay Buffer	1000 mL	4002-0010
DELFIA Assay Buffer without detergents, 5X conc.	250 mL	CR85-100
DELFIA Research Buffer Set, 2X conc.	$250~\mathrm{mL}$	CR86-100
Hybridization Buffer	50 mL	4006-0010
DELFIA L*R Binding Buffer Concentrate (10x)	250 mL	CR134-250

## Wash Solutions

DELFIA Wash Concentrate is ideal for most DELFIA assays. It is a 25-fold concentrate of Tris-HCl buffered (pH 7.8) salt solution with Tween 20. It contains Germall II as preservative.

DELFIA L\*R Wash Concentrate is a 25-fold concentrate of Tris-HCl buffer containing  ${\rm MgCl}_2$  and  ${\rm NaN}_3$ , pH 7.5. The wash solution is optimal for DELFIA ligand-receptor binding assays conducted using AcroWell filtration plates.

Type of product	Amount	Part No.
DELFIA Wash Concentrate	250 mL	1244-114
DELFIA Wash Concentrate	1000 mL	4010-0010
DELFIA L*R Wash Concentrate (25x)	250 mL	CR135-250

## Dissociation-enhancement solutions

In most DELFIA assays, the labeled biomolecule as such is practically non-fluorescent. However, after the binding reaction is complete fluorescence is developed by the addition of either Enhancement Solution or DELFIA Inducer. Both of these are suitable for the detection of both europium and samarium. DELFIA Inducer is used for all DELFIA chelates of these lanthanides, while Enhancement Solution is recommended for N1 chelates only.

The speed of the dissociation enhancement process will depend on the original chelate used, the choice of DELFIA Enhancement Solution or DELFIA Inducer, and whether or not shaking is used.

50 mL of either DELFIA Enhancement Solution or DELFIA Inducer is sufficient for 250 wells of a standard 96-well microplate.

# Suitability of DELFIA Enhancement Solution and DELFIA Inducer for use with various europium chelate types. (Times required to reach 98% of the maximum signal)

	DELFIA Enhancement Solution		DELFIA Inducer		
Chelate	Shaking (slow)	Without shaking	Shaking (slow)	Without shaking	
N1	5 min	45 min	5 min	30 min	
DTPA	30 min	180 min	5 min	30 min	
W1024	45 min	120 min	5 min	30 min	
W2014	45 min	120 min	5 min	30 min	

#### Detection of terbium and dysprosium

Multianalyte assays may involve the use of dysprosium or terbium chelates as secondary, tertiary or quaternary labels. A different enhancing substance, DELFIA Enhancer is used for their detection. The detection with DELFIA Enhancer requires also the use of either DELFIA Enhancement Solution or DELFIA Inducer.

Type of product	Amount	Part No.
DELFIA Enhancement Solution	50 mL	1244-104
DELFIA Enhancement Solution	250 mL	1244-105
DELFIA Enhancement Solution	1000 mL	4001-0010
DELFIA Enhancer	$50 \mathrm{mL}$	C500-100
DELFIA Inducer	250 mL	4013-0010

#### Other Solutions

#### Stabilizer

Bovine serum albumin (BSA) for use in coating of plates and as a stabilizing agent for storage of lanthanide-labeled compounds. The reagent is DTPA purified and, consequently, free of heavy metals.

Type of product	Amount	Part No.
Stabilizer (DTPA-purified BSA), 7.5%	50 mL	CR84-100

#### Standard solutions for calibration

For GLP or for general problem solving, lanthanide standard solutions are ready-to-use preparations of europium, samarium or terbium.

Type of product	Amount	Part No.
DELFIA 10 nmol/L Samarium standard solution	50 mL	B115-100
DELFIA 1 nmol/L Europium standard solution	$50 \mathrm{mL}$	B119-100
DELFIA 1 nmol/L Terbium standard solution	50 mL	C558-100

# DELFIA® Products in orde

Product code	Product	Package	Page
AD0001	DELFIA Eu-N1 ITC chelate & Eu standard	20 mg	18
AD0002	DELFIA Eu-N1 iodoacetamido chelate & Eu standard	1 mg	18
	DELFIA Eu-N1 amino chelate & Eu standard		
	DELFIA Eu-N1 DTA chelate & Eu standard		
	DELFIA Sm-N1 ITC chelate & Sm standard		
	DELFIA Sm-N1 iodoacetamido chelate & Sm standard		
	DELFIA Sm-N1 DTA chelate & Sm standard		
	DELFIA Tb-N1 ITC chelate & Tb standard		
	DELFIA Tb-N1 iodoacetamido chelate & Tb standard		
	DELFIA Tb-N1 DTA chelate & Tb standard		
	DELFIA Eu-DTPA ITC chelate & Eu standard		
	DELFIA Eu-DTPA iodoacetamido chelate & Eu standard		
	DELFIA Eu-DTPA amino chelate & Eu standard		
	DELFIA Eu-DTPA anno chetate & Eu standard		
	DELFIA Sm-DTPA ITC chelate & Sm standard		
	DELFIA Tb-DTPA ITC chelate & Tb standard		
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PY20)		
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PY20)		
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PT66)		
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (PT66).		
	DELFIA Tb-N1 labeled streptavidin		
	DELFIA Tb-N1 labeled streptavidin		
	DELFIA Sm-N1 labeled streptavidin		
	DELFIA Sm-N1 labeled streptavidin		
	DELFIA Eu-N1 labeled anti-HA antibody		
AD0054	DELFIA Eu-N1 labeled anti-HA antibody	50 μg	11
	DELFIA Eu-N1 labeled anti-phosphothreonine antibody		
AD0105	DELFIA Eu-N1 labeled anti-rabbit antibody	200 μg	11
AD0106	DELFIA Eu-N1 labeled anti-rabbit antibody	1 mg	11
AD0108	DELFIA Eu-N1 labeled anti-6xHis antibody	50 μg	11
AD0109	DELFIA Eu-N1 labeled anti-6xHis antibody	1 mg	11
AD0112	DELFIA Eu-N1 labeled anti-c-myc antibody	50 µg	11
	DELFIA Eu-N1 labeled anti-c-myc antibody		
	DELFIA EuTDA cytotoxicity reagents		
	DELFIA Tyrosine Kinase kit		
AD0124	DELFIA Eu-N1 labeled anti-mouse antibody	50 ug	10
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (P-Tyr-1		
	DELFIA Eu-N1 labeled anti-phosphotyrosine antibody (P-Tyr-1		
	DELFIA GTP-binding kit		
AD0183	DELFIA Eu-N1 labeled anti-phospho-Akt substrate antibody	10 10 10	16
	DELFIA Eu-N1 labeled anti-phosphoserine antibody		
	DELFIA Eu-N1 labeled anti-phospho-(Ser) 14-3-3 motif antibod		
	DELFIA Cell proliferation kit		
	DELFIA Eu-N1 labeled anti-mouse antibody		
	DELFIA Eu-labeled motilin		
	DELFIA Eu-labeled motilin		
	DELFIA Eu-labeled motthi DELFIA Eu-labeled interleukin-8		
	DELFIA Eu-labeled interleukin-8 DELFIA Eu-labeled interleukin-8		
	DELFIA Eu-labeled interieukin-8 DELFIA Eu-labeled galanin		
	DELFIA Eu-labeled galanin		
	DELFIA Eu-labeled EGF		
	DELFIA Eu-labeled EGF		
	DELFIA Eu-labeled neurotensin		
	DELFIA Eu-labeled neurotensin		
	DELFIA Eu-labeled neurokinin A		
AD0222	DELFIA Eu-labeled neurokinin A	1200 pmol	13

# er of product number

Product code	Product	Package	Page
AD0223	DELFIA Eu-labeled substance P	200 pmol	13
	DELFIA Eu-labeled substance P		
	DELFIA Eu-labeled NDP-αMSH		
	DELFIA Eu-labeled NDP-αMSH		
	DELFIA Eu-labeled bombesin		
	DELFIA Eu-labeled bombesin		
	DELFIA Yellow Plate, 96-well		
	DELFIA Anti-mouse-coated yellow plate, 96-well		
	DELFIA Anti-rabbit-coated yellow plate, 96-well		
	DELFIA Streptavidin-coated yellow plate, 96-well		
R115 100	DELFIA 10 nmol/L Samarium standard solution	50 mI	21
	DELFTA 10 milot/E Samartum standard solution		
	DELFTA T Innov'E Europium standard solution		
	DELFIA BATDA labeling reagent		
	DELFIA Enhancer		
	DELFIA 1 nmol/L Terbium standard solution		
	DELFIA Streptavidin-coated white plate, 384-well		
	DELFIA Anti-mouse-coated white plate, 384-well		
	DELFIA Anti-rabbit-coated white plate, 384-well		
	DELFIA Anti-sheep-coated yellow plate, 96-well		
	DELFIA Anti-sheep-coated white plate, 384-well		
	Stabilizer (DTPA-purified BSA), 7.5%		
CR85-100	DELFIA Assay Buffer without detergents, 5X conc	250 mL	20
CR86-100	DELFIA Research Buffer Set, 2X conc	250 mL	20
CR89-102	DELFIA cAMP kit	2*96 wells	15
CR92-102	DELFIA cAMP 384 kit	2*384 wells	15
	DELFIA GTP-Eu		
	DELFIA L*R Binding Buffer Concentrate (10x)		
	DELFIA L*R Wash Concentrate (25x)		
	DELFIA Eu-labeled TNFα		
	DELFIA Eu-labeled interleukin-2		
	DELFIA Eu-labeled interleukin-5		
	DELFIA Enhancement Solution		
	DELFIA Enhancement Solution		
	DELFTA Enhancement Solution		
	DELFIA Assay Buffer		
	DELFIA Wash Concentrate		
	DELFIA Eu-Labeling reagent		
1244-302	DELFIA Eu-Labeling kit	0,2 mg	17
	DELFIA Sm-Labeling kit		
	DELFIA Eu-labeled anti-human IgG		
	DELFIA Eu-labeled streptavidin		
	DELFIA Eu-labeled protein G		
	DELFIA Microtitration Plate, 8 x 12 strips, clear plate		
	DELFIA Enhancement Solution		
4002-0010	DELFIA Assay Buffer	1000 mL	20
4003-0010	DELFIA cAMP kit	10*96 wells	15
4004-0010	DELFIA cAMP 384 kit	10*384 wells	15
	Lysis buffer		
	Hybridization Buffer		
	DELFIA Anti-mouse-coated clear plate, 8 x 12 strips		
	DELFIA Anti-rabbit-coated clear plate, 8 x 12 strips		
	DELFIA Anti-Tabbit-coated clear plate, 8 x 12 strips		
	DELFTA Streptavidin-coated clear plate, 8 x 12 strips  DELFTA Wash Concentrate		
4010-001U	DELFIA Inducer	4111 UC	∠1



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