

Caution: For Laboratory Use. A product for research purposes only

**Eu-W1024-labeled Anti-Phospho-40S ribosomal protein S6
(Ser235/236) Antibody****Product No.: TRF0217-D****Lot No.: 3200127****Material Provided**

Format: TRF0217-D 10 µg (1 562 assay points*)
TRF0217-M 100 µg (15 625 assay points*)
*Assuming 40 fmol/assay point

Manufacturing Date: August 31, 2022

Product Information

Antibody: Europium-labeled rabbit monoclonal antibody recognizing human 40S ribosomal protein S6 phosphorylated at both Ser235 and Ser236.

Storage Buffer: 50 mM Tris-HCl (pH 7.4), 0.9% NaCl with 0.05% sodium azide as preservative and 0.1 % BSA

Molecular Weight: 160 000

Stability: This product is stable for at least **18 months** from the manufacturing date when stored in its original packaging and at the recommended storage conditions.

Storage Conditions: Store at 4°C

Safety Note: The storage buffer contains sodium azide (NaN₃) as a preservative. Disposal of all waste should be in accordance with local regulations.

Quality Control

This product passed QC release specifications based on spectrophotometric analysis of the labeled antibody.

Labeling Ratio: 6.8 (Eu/Ab)

Concentration: 100 µg/mL (0.625 µM)

Recommended Assay Conditions

RSK2 KINASE: ATP TITRATION

SUGGESTED METHOD:

(Specific applications might require optimization)

Reagent Preparation

- Prepare 1X Kinase Assay Buffer: 50 mM HEPES pH 7.5, 1 mM EGTA, 10 mM MgCl₂, 2 mM DTT and 0.01% Tween-20.
- Prepare a 4X *ULight*-40S ribosomal protein S6 (pSer235/Ser236) Peptide solution: dilute *ULight*-40S ribosomal protein S6 (pSer235/236) to a concentration of 200 nM in Kinase Assay Buffer.
- Prepare a 2X RSK2 solution: dilute enzyme to a concentration of 50 pM in Kinase Assay Buffer. Keep on ice.
- Prepare a 4X ATP solution: dilute ATP to concentrations ranging from 40 nM to 4 mM (serial half-log dilutions) in Kinase Assay Buffer. Keep on ice.
- Prepare 1X Detection Buffer: dilute 0.5 mL of 10X Detection Buffer with 4.5 mL of H₂O.
- Prepare a 4X Stop solution*: dilute EDTA to a concentration of 24 mM in 1X Detection Buffer.
- Prepare a 4X Detection Mix: dilute Europium-anti-phospho-40S ribosomal protein S6 (Ser235/Ser236) Antibody to a concentration of 8 nM in 1X Detection Buffer.

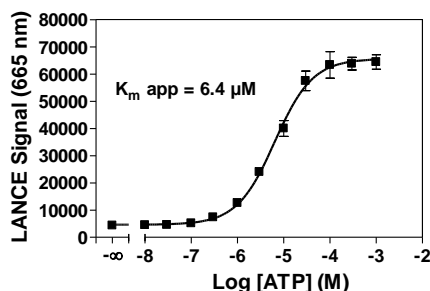
Protocol

- Pipet 5 µL of 4X RSK2 solution (25 pM final concentration).
- Add 2.5 µL of 2X *ULight*-40S ribosomal protein S6 (pSer235/Ser236) peptide solution into a 384-well white OptiPlate-384 (50 nM final concentration).
- Add 2.5 µL of 4X ATP solution (10 nM to 1 mM final concentrations).
- Cover plate with TopSeal-A and incubate 60 min at 23°C.
- Add 5 µL of 4X Stop solution* and incubate 5 min at 23°C.
- Add 5 µL of Detection Mix (2 nM Eu-anti-phospho-40S ribosomal protein S6 (Ser235/236) Antibody final concentration).
- Cover plate with TopSeal-A and incubate 60 min at 23°C.
- Remove TopSeal-A and read in TR-FRET mode at 665 nm (excitation at 320 or 340 nm).

**Alternatively, the Stop solution and Detection Mix can be premixed and added together to the kinase reaction.*

TYPICAL ATP TITRATION DATA obtained using the EnVision® Multilabel Reader:

RSK2 kinase assay using *ULight*TM-rpS6 (pSer235/Ser236) Peptide and
Eu-anti-phospho-rpS6 (Ser235/236) Antibody



Suggested Materials

	Supplier	Cat. No.
• Substrate: <i>ULight</i> TM -rpS6 (pSer235/Ser236) Peptide	PerkinElmer	TRF0129
• Antibody: Europium-anti-P-rpS6 (Ser235/236)	PerkinElmer	TRF0217
• Kinase: RSK2 (RPS6KA3)	Carna Biosciences	01-150
• Detection Buffer: LANCE® Detection Buffer, 10X	PerkinElmer	CR97-100
• Plate: OptiPlate TM -384, white	PerkinElmer	6007299
• TopSeal TM -A	PerkinElmer	6050195

Please visit our website for additional resource:

www.perkinelmer.com/LANCE

This product is not for resale or distribution except by authorized distributors.

LANCE® products may be covered by one or more the following patents: US 5,202,423 and US 5,324,825

LIMITED WARRANTY: PerkinElmer BioSignal Inc. warrants that, at the time of shipment, the products sold by it are free from defects in material and workmanship and conform to specifications which accompany the product. PerkinElmer BioSignal Inc. makes no other warranty, express or implied with respect to the products, including any warranty of merchantability or fitness for any particular purpose. Notification of any breach of warranty must be made within 60 days of receipt unless otherwise provided in writing by PerkinElmer BioSignal Inc. No claim shall be honored if the customer fails to notify PerkinElmer BioSignal Inc. within the period specified. The sole and exclusive remedy of the customer for any liability of PerkinElmer BioSignal Inc. of any kind including liability based upon warranty (express or implied whether contained herein or elsewhere), strict liability contract or otherwise is limited to the replacement of the goods or the refunds of the invoice price of goods. PerkinElmer BioSignal Inc. shall not in any case be liable for special, incidental or consequential damages of any kind.

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

Copyright ©2009, PerkinElmer, Inc. All rights reserved. PerkinElmer® is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.