TECHNICAL DATA SHEET

LANCE® *Ultra* Research Reagents

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

Eu-W1024-labeled Anti-phospho Acetyl-CoA carboxylase (Ser79) Antibody

Product No.: TRF0208-D / TRF0208-M

Lot No.: 3129845

Material Provided

Format:	TRF0208-D 10 µg (1 562 assay points*) TRF0208-M 100 µg (15 625 assay points*) *Assuming 40 fmol/ assay point
Volume:	100 µL (TRF0208-D) or 1 mL (TFR0208-M)
Manufacturing Date:	**February 22, 2023**

Product Information

Antibody:	Europium-labeled mouse monoclonal antibody recognizing phospho-Ser79 in rat acetyl CoA carboxylase.
Molecular Weight:	160 000
Storage Buffer:	50 mM Tris-HCl (pH 7.4), 0.9% NaCl, 0.1% BSA and 0.05% sodium azide as preservative
Stability:	This product is stable for at least **24 months** from the manufacturing date when stored in its original packaging and the recommended storage conditions.
Storage Conditions:	Store at 4°C
Safety Note:	The storage buffer contains sodium azide (NaN_3) as a preservative. Disposal of all waste should be in accordance with local regulations.

Quality Control

The QC release specifications are based on spectrophotometric analysis of the labeled antibody. We certify that these results meet our quality release criteria.

Labeling Ratio:	6.28 (Eu/Ab)
Concentration:	100 µg/mL (0.625 µM)

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Recommended Assay Conditions

AMPKα1 kinase: ATP titration

Reagent Preparation:

- Prepare 1X Kinase Assay Buffer: 50 mM HEPES pH 7.5, 1 mM EGTA, 10 mM $MgCl_2$, 2 mM DTT and 0.01% Tween-20.
- Prepare a 2X AMPKα1 solution: dilute enzyme to a concentration of 4 nM in Kinase Assay Buffer. Keep on ice.
- Prepare a 4X U*Light*-Acetyl CoA Carboxylase (Ser79) peptide solution: dilute U*Light*-Acetyl CoA carboxylase (Ser79) to a concentration of 200 nM in Kinase Assay Buffer.
- 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 H_2O.
- Prepare a 4X Stop solution*: dilute EDTA to a concentration of 40 mM in 1X Detection Buffer.
- Prepare a 4X Detection Mix: dilute Europium-anti-phospho-Acetyl CoA Carboxylase (Ser79) antibody to a concentration of 8 nM in 1X Detection Buffer.

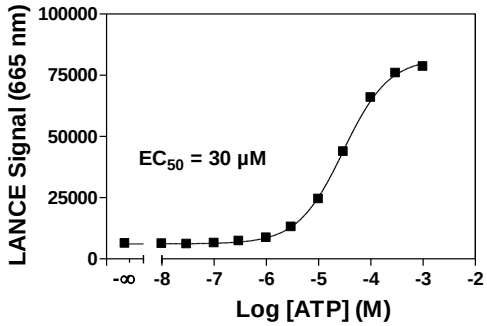
Protocol:

- Pipet 5 µL of 2X AMPKα1 solution into a 384-well white OptiPlate-384 (2 nM final concentration).
- Add 2.5 µL of 4X U*Light*- Acetyl CoA carboxylase (Ser79) solution (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 30 min at 23°C.
- Add 5 µL of 4X Stop solution* and incubate 5 min at 23°C.
- Add 5 µL of 4X Detection Mix (2 nM Eu-anti-phospho-Acetyl CoA Carboxylase (Ser79) final conc.).
- 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

AMPKα1 kinase assay using U*Light*-Acetyl CoA Carboxylase (Ser79) Peptide and Eu-anti-phospho-Acetyl CoA Carboxylase (Ser79) Antibody obtained using the EnVision® Multilabel Reader:



Suggested Materials

	Supplier	Cat. No.
• Substrate: U*Light*™- Acetyl CoA Carboxylase (Ser79) Pept.	PerkinElmer	TRF0118
• Antibody: Eu- anti-phospho-Acetyl CoA Carboxylase (Ser79)	PerkinElmer	TRF0208
• Kinase: AMPKα1	Carna Biosciences	02-113
• Detection Buffer: LANCE® Detection Buffer, 10X	PerkinElmer	CR97-100
• Plate: OptiPlate™-384, white	PerkinElmer	6007299
• TopSeal™: TopSeal-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

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