

Research use only. Not for use in diagnostic procedures.

LANCE® Ultra

# Eu-W1024 labeled Anti-phospho-Histone H3 (Thr3) Antibody

Product number: TRF0211-M Lot Number: 3297720

**Product Format:** TRF0211-D: 10 μg

TRF0211-M: 100 μg

Manufacturing date: 4/17/2024 Document version: 1

#### **Product Information**

**Antibody:** Europium-labeled rabbit monoclonal antibody recognizing phospho-Thr3 in human Histone H3.

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

Molecular Weight: 160 000

**Stability:** This product is stable for at least 12 months from the manufacturing date when stored in its

original packaging and at the recommended storage conditions.

**Storage Conditions:** Store at -20°C. Repeated freezing and thawing should be avoided.

### **Quality Control**

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

Labeling Ratio: 7.0 / 1

**Concentration**:  $0.625 \, \mu M$ ,  $100 \, \mu g/mL$ 

## **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 MgCl<sub>2</sub>, 2 mM DTT and 0.01% Tween-20.
- Prepare a 2X RSK2 solution: dilute enzyme to a concentration of 8 nM in 1X Kinase Assay Buffer. Keep on ice.
- Prepare a 4X ULight-Histone H3 (Thr3/Ser10) Peptide solution: dilute ULight-Histone H3 (Thr3/Ser10) Peptide to a concentration of 200 nM in 1X 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<sub>2</sub>O.
- 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-Histone H3 (Thr3) Antibody to a concentration of 8 nM
   in 1X Detection Buffer.

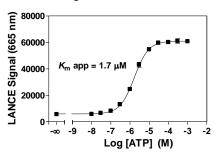
#### Protocol

- Pipet 5 µL of 2X RSK2 solution into a 384-well white OptiPlate-384 (4 nM final concentration).
- Add 2.5 μL of 4X ULight-Histone H3 (Thr3/Ser10) Peptide 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 45 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 Europium-anti-phospho-Histone H3 (Thr3) 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).

**Typical Product Data** 

<sup>\*</sup>Alternatively, the Stop solution and Detection Mix can be premixed and added together to the kinase reaction.

# RSK2 kinase assay using ULight-Histone H3 (Thr3/Ser10) Peptide and Eu-anti-phospho-Histone H3 (Thr3) Antibody obtained using the EnVision® Multilabel Reader:



#### **Suggested Materials**

#### Supplier

Substrate: ULight™- Histone H3 (Thr3/Ser10) Peptide Revvity Inc
 Antibody: Eu- anti-phospho-Histone H3 (Thr3) Antibody Revvity Inc

• Kinase: RSK2 Carna Biosciences

Detection Buffer: LANCE® Detection Buffer, 10X Revvity Inc
Plate: OptiPlate™-384, white Revvity Inc
TopSeal™-A Revvity Inc

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