

# LANCE<sup>®</sup> Ultra Research Reagents

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

 $ULight^{^{TM}}$ -labeled Streptavidin

Product No.: TRF0102-D / TRF0102-M / TRF0102-R

Lot No.: 676-537-A

#### **Material Provided**

Format: TRF0102-D 1 nmole (1 000 assay points\*)

TRF0102-M 10 nmoles (10 000 assay points\*)
TRF0102-R 100 nmoles (100 000 assay points\*)

\*Assuming 1 pmol/ assay point

**Volume:** 100 μL (TRF0102-D), 1 mL (TFR0102-M) or 10 mL (TRF0102-R)

Manufacturing Date: June 22, 2011

### **Product Information**

Molecular Weight: 60 000

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. Store protected from light.

**Safety Note**: The storage buffer contains sodium azide (NaN<sub>3</sub>) 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 protein. We certify that theses results meet our quality release criteria.

**Labeling Ratio:** 2.9 (dye molecule/protein)

**Concentration:** 600  $\mu$ g/mL (10  $\mu$ M)



# **Recommended Assay Conditions**

Src Kinase assay: ATP titration

### **Reagent Preparation:**

- Prepare 1X Kinase Buffer: 50 mM Tris-HCl pH 7.5, 1 mM EGTA, 10 mM MgCl<sub>2</sub>, 2 mM DTT and 0.01% Tween-20.
- Prepare a 2X c-Src enzyme solution: dilute the enzyme to a concentration of 2 nM in Kinase Buffer. Keep on
- Prepare a 4X mix of biotin-poly GT: dilute biotin-poly GT to a concentration of 400 nM in Kinase Buffer. Keep on ice
- Prepare a 4X mix of ATP: dilute ATP to concentrations ranging from 40 nM to 4 mM (serial half-log dilutions) in Kinase 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: prepare a 40 mM EDTA solution in 1X Detection Buffer.
- Prepare a 4X Detection Mix: dilute the Eu-W1024-labeled PY20 antibody to 8 nM and U*Light*-Streptavidin to 200 nM in 1X Detection Buffer.

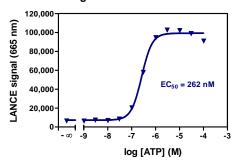
#### Protocol:

- Pipet 5 µL of 2X c-Src enzyme into a 384-well white OptiPlate™-384 (1 nM final concentration).
- Add 2.5 μL of 4X biotin-poly-GT (100 nM final concentration).
- Add 2.5 µL of 4X ATP mix (10 nM to 1 mM final concentrations).
- Cover plate with TopSeal-A and incubate 90 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-W1024-labeled PY20 antibody and 50 nM U*Light*-Streptavidin final concentrations).
- 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 ATP Titration Data**

Src kinase assay using ULight-Streptavidin, biotin poly GT and Eu-PY20 anti phosphotyrosine obtained using the EnVision® Multilabel Reader:



**Supplier** 

Cat. No.

# **Suggested Materials**

•	Detection: U <i>Light</i> <sup>™</sup> - Streptavidin	PerkinElmer	TRF0102
•	Substrate: biotin-poly GT (4:1)	PerkinElmer	Custom product
•	Antibody: Eu-W1024 anti-phosphotyrosine (PY20)	PerkinElmer	AD0066
•	Kinase: c-Src	Upstate	14-326
•	Detection Buffer: LANCE® Detection Buffer, 10X	PerkinElmer	CR97-100
•	Plate: OptiPlate™-384, white	PerkinElmer	6007299
•	TopSeal™: TopSeal-A	PerkinElmer	6005185

Please visit our website for additional resource:

www.perkinelmer.com/LANCE

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