



# Gator® Strep-Tactin XT Probe for Analysis of Twin-Strep-tag® Fusion Proteins

Gator® Strep-Tactin XT Probes are designed to capture proteins with Twin-Strep-tag® (TST). These probes are highly versatile in terms of their applicability. Proteins tagged with TST retain full functionality after purification, so it can be used for the isolation of sensitive proteins in native state. The Strep-Tactin XT probes are coated with Strep-Tactin® XT (IBA-Lifesciences) that binds to TST with pM affinity, making the probe ideal for the quantitation of low yield proteins as well as robust kinetic analysis.

#### PRODUCT INFORMATION

Part Number 160033

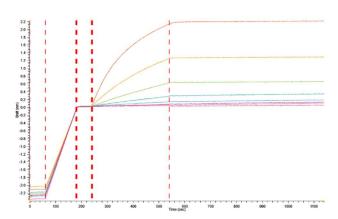
#### Includes

Strep-Tactin XT Probes (96 probes/tray)

#### KEY BENEFITS

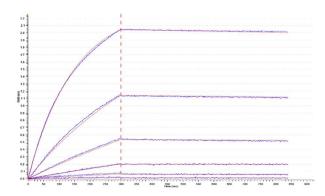
- Quantitation of TST fusion proteins in purified and crude matrices.
- Robust kinetics with pM affinity between Strep-Tactin XT and TST.
- Minimal interference from Biotin.
- Regenerable up to 10 times without loss in binding capacity.

## LOW nM AFFINITY BETWEEN TST FUSION HUMAN IL-17A & IL-17F HETERODIMER AND HUMAN IL-17 RA



Kinetic experiment between TST fusion Human IL-17A&IL-17F Heterodimer Protein and Human IL-17 RA

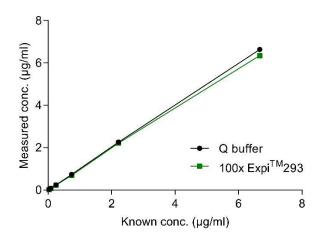
#### HIGH QUALITY FIT WITH R<sup>2</sup>=0.99



Global-fit analysis using GatorOne software for interaction between IL17A&F heterodimer and IL17RA.  $K_D$  = 1.99 nM ( $R^2$  = 0.99) Model: 1:1 Global Rmax Linked

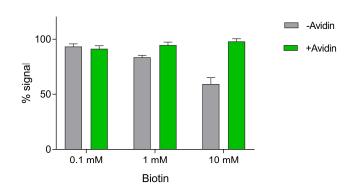


### COMPARABLE PERFORMANCE FOR QUANTITATION OF TST GFP IN CELL LYSATE AND BUFFER



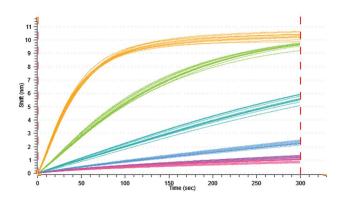
Standard curve for TST GFP in Q buffer vs in cell lysate in Expi293 media diluted 1:100 in Q buffer.

#### MINIMAL INTERFERENCE FROM BIOTIN



Strep-Tactin® XT probe shows no loss of signal in the presence of 0.1 mM Biotin, which is higher than the biotin content in most mammalian cell culture media. For matrices containing higher biotin content, 1 mg/mL avidin can be added to prevent interference.

#### PROBE IS REGENERABLE 10 TIMES



Quantitation of TST GFP in HEK293 cell lysate (Expi293TM media), diluted 100X in Q buffer. Overlapping curves show minimal loss of performance over 10 regenerations.

#### **SUMMARY**

Strep-Tactin XT probe is very useful for quantitation and kinetics of TST fusion proteins and offers the following advantages.

- Quantitation of TST fusion proteins down to low µg/mL.
- Reliable kinetics due to pM affinity between Strep-Tactin®XT and TST.
- Compatible with crude matrices including mammalian cell culture media containing biotin.
- Regenerable up to 10 times without losing binding capacity using Gator® Regen Buffer (PN: 120063).

Note: For proteins tagged with Strep-tag® II, ask about our custom anti strep-tag-II probe.

