



Product Information Sheet

Product Name:	Streptavidin, Eu labeled
Catalog Number:	AS-72252-50, -100
Size:	50µg, 100µg
Concentration:	0.5mg/mL
Degree of Substitution: (DOS)	Eu to streptavidin labeling ratio is stated on each vial
Spectral properties:	Ex/Em=325/620 nm
Streptavidin:	Recombinant streptavidin (AnaSpec Cat. AS-72177)
Storage buffer:	10 mM phosphate, 150 mM NaCl, 0.05% Proclin-300, pH 7.2
Storage:	Europium-streptavidin conjugate is stable for 1~2 months at 4 °C. For long-term storage, divide conjugate into aliquots and store at -20 °C or add an equal volume of glycerol (ACS grade or higher) and store the solution at -20 °C without aliquoting. Avoid multiple thaw-freeze cycles. The product is stable for 1 year at -20 °C. Protect Eu-streptavidin conjugate from heat and light. Avoid buffers that contain Fe and Mn ions.
Instructions:	Recommended working concentration for TR-FRET assays is 0.1-1µg/ml with red dyes as an acceptor such as HiLyte™ Fluor 647, either Cy5 ® or CyLyte, Alexa Fluor® 647 or APC. When using this product in TR-FRET application with HiLyte™ Fluor 647, suggested instrument settings are Ex/Em=325/670nm. Optimal working concentration for other applications must be determined by an investigator. This product can be diluted in buffers with pH ranging from 5.5-9.0, containing up to 20 mM EDTA, 20 mM DTT, and up to 1% Triton X-100 without significant loss of the luminescent activity of Europium chelate.
Background:	TR-FRET (Time-Resolved Fluorescence Resonance Energy Transfer) combines advantages of time resolved fluorescence and FRET. Energy is transferred from a long-lived lanthanide chelate, such as Europium to an acceptor molecule with short-lived fluorescence. Eu-labeled donors have a longer lasting fluorescence signal than standard fluorescence dyes, which allows for measurements to be taken after decay of sample background autofluorescence, leaving only the TR-FRET signal, essentially free of background interference. In addition, large Stokes shift of lanthanides results in high signal-to-noise ratio due to minimal overlap between excitation and emission wavelengths.

For *in vitro* research use only

Related Products

Product Name	Cat. #
AnaTag Europium Protein Labeling Kit	AS-72246
AnaTag TR-FRET Protein Labeling Kit	AS-72247
AnaTag HiLyte™ Fluor 647 Protein Labeling kit	AS-72049
AnaTag HiLyte™ Fluor 647 Microscale Protein Labeling kit	AS-72050
Goat anti-Mouse IgG (H+L), highly cross-adsorbed, Eu labeled	AS-72248
Goat anti-Rabbit IgG (H+L), highly cross-adsorbed, Eu labeled	AS-72249
Mouse monoclonal anti-GST tag, IgG, Eu labeled	AS-72250
Mouse monoclonal anti-his tag, IgG, Eu labeled	AS-72251
Streptavidin-HiLyte™ Fluor 647 Conjugated	AS-60667
HiLyte™ Fluor 647 acid, SE	AS-81256

References:

1. Hermanson G. T. (1996), Bioconjugate Techniques, Academic Press, New York
2. Lakowicz J. R. (2006), Principles of Fluorescence Spectroscopy, Springer, New York