

Lot	20250516/FRM013
Reference #	MBIO-7973-FITC
Amount per aliquot	100 µg

MBIO-7973-FITC (His-Tag NovoBody™ Mono, (FITC conjugate) Twin-Strep-Tag)

Description

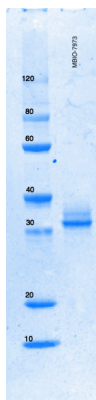
Molecule	Histidine Tag NovoBody™, C-terminal Twin-Strep tag, FITC-conjugate
Source	Expressed in <i>E. coli</i> cells, Purified via Streptactin XT resin & SEC
Target	Histidine tag
Characterization	SDS-PAGE, SEC-MALS, Flow Cytometry, and BioLayer Interferometry

Specifications

Physical Appearance	White Powder
Molecular Weight	32.48 kDa
Formulation	PBS, 10% Trehalose, pH 7.2

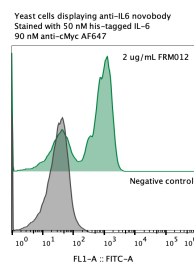
SDS-PAGE

Gel analysis of final purified sample after Streptactin XT affinity purification and size exclusion chromatography. Sample appears at the expected molecular weight of 32.48 kDa.



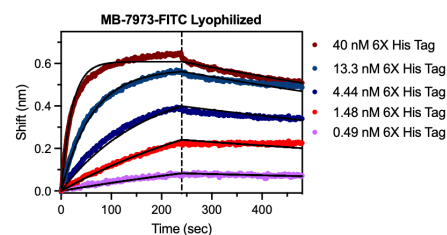
Flow Cytometry

Yeast cells displaying a 6x-His-tagged protein (green) or a protein lacking a 6x-His-tag (negative control, grey) stained with 2 µg/mL MBIO-7973-FITC, 2 µg/mL anti-HA iFluor647 (GenScript Cat no. A01808), and SA-PE (Invitrogen Cat no. S21388). Recommended concentration: 2 µg/mL MB-7973-FITC.



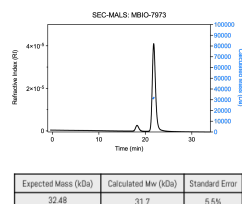
BioLayer Interferometry

Sample binds target analyte with high affinity, slow off-rate, and an estimated K_d of 0.65 nM, K_{on} of $1.16E+006$ 1/Ms and K_{off} of $7.52E-004$ 1/s when MBIO-7973-Biotin is loaded onto GatorBio Streptactin-XT Probes and his-tagged analyte (CD16a with a C-terminal 6X His; Acro Biosystems CD8-H52H4) is titrated at 40, 13.3, 4.44, 1.48, and 0.49 nM.



SEC-MALS

Size exclusion chromatography coupled with multi angle light scattering demonstrates that the sample elutes at the expected molecular weight and is >95% monomer.



Shipping, Storage, Reconstitution and Handling

The product is shipped ambient. Upon receipt, immediately store lyophilized protein aliquots at -20°C with desiccant. Reconstitute each aliquot with 100 µL of sterile deionized water to a stock solution of 1.00 mg/ml (30.94 µM). Solubilize at room temperature with gentle mixing, do not vortex.

It is strongly recommended to sub-aliquot and store samples at -80°C for further testing. Limit freeze thaws to 2 total cycles. The expected stability for this product is 12 months when the reconstituted sample is stored at -80°C under sterile conditions. If an exact concentration is desired, Nanodrop (A280) the protein using the following Extinction Coefficient: 56840 M⁻¹cm⁻¹. Apply necessary A280 corrections for fluorophore absorbance when measuring concentration.