

Datasheet for 200-345-382

6X His Tag Antibody DyLight™ 800 Conjugated**Overview**

Description:	Anti-6X His Epitope Tag (MOUSE) Monoclonal Antibody DyLight™ 800 Conjugated - 200-345-382
Item No.:	200-345-382
Size:	100 µg
Applications:	Dot Blot, ELISA, WB
Reactivity:	His-Tag
Host Species:	Mouse

Product Details**Background:**

6X His Tag Antibody as well as other Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged protein's biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures. Expression vectors producing epitope tag fusion proteins are available for a variety of host expression systems including bacteria, yeast, insect and mammalian cells. Rockland Immunochemicals produces anti-epitope tag antibodies against many common epitope tags including Myc, GST, GFP, 6X His, MBP, FLAG and HA. Rockland Immunochemicals also produces antibodies to other tags including FITC, Rhodamine (TRITC), DNP and biotin.

Synonyms:	mouse anti-6X His Tag DyLight™ 800 conjugated Antibody, DyLight™ 800 conjugated mouse anti-6X His Tag Antibody, anti-HIS, HIS Antibody, 6X His Tag Antibody, HHHHHH epitope tag antibody
Host Species:	Mouse
Conjugate:	DyLight™ 800
Clonality:	Monoclonal
Clone ID:	33D10.D2.G8
Format:	IgG1

F/P Ratio: 1.8

Specific Activity: 2.6

Target Details

Reactivity: His-Tag

Immunogen Type: Conjugated Peptide

Immunogen: This antibody was produced in mice by repeated immunizations with 6X His epitope tag peptide H-H-H-H-H-H conjugated to KLH using maleimide.

Purity/Specificity: This protein-A purified antibody is directed against the 6X His motif and is useful in determining its presence in various assays. This monoclonal anti-6X His tag antibody detects over-expressed proteins containing the 6X His epitope tag. To date, this antibody has reacted with all His tagged proteins so far tested. In western blotting of bacterial extracts, the antibody does not cross-react with endogenous proteins. The antibody recognizes the His-tag (His-His-His-His-His-His) fused to either the amino- or carboxy-termini of targeted proteins in transfected or transformed cells.

Relevant Links: • [200-345-382 SDS](#)

Application Details

Tested Applications: Dot Blot, ELISA, WB

Application Note: Mouse Anti-6X HIS EPITOPE TAG DyLight™800 Conjugated has been tested in ELISA, dot blot, and western blot and is optimally suited for monitoring expression of His-tagged fusion proteins. As such, anti-6X His/6X His can be used to identify fusion proteins that contain the 6X His epitope. The antibody recognizes the His tag fused either to the amino- or carboxy- termini of targeted proteins. This product is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA), fluorescent polarization, FRET and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

FLISA: >1:20,000

IF: >1:5,000

WB: 1:10,000-1:25,000

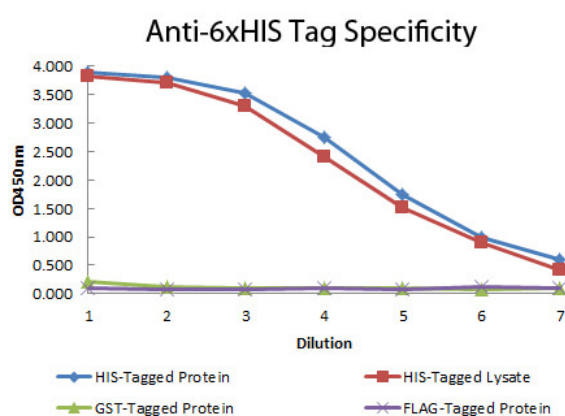
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



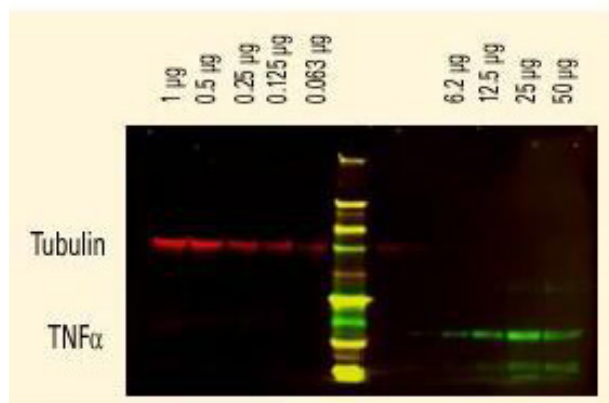
ELISA

ELISA of Mouse anti-6xHIS Tag Antibody. Antigen: HIS-tagged purified protein and E. coli cell lysates expressing HIS-Tagged construct, GST- and RON-tagged purified proteins. Coating amount: 0.15ug per well. Primary antibody: 6xHIS Tag antibody at 100ug/mL. Dilution series: 2-fold. Mid-point concentration: 200ng/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000. Substrate: TMB (p/n TMBE-1000).

Diagram

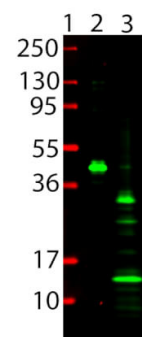
Properties of DyLight™ Conjugates.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ϵ (M ⁻¹ cm ⁻¹)	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800



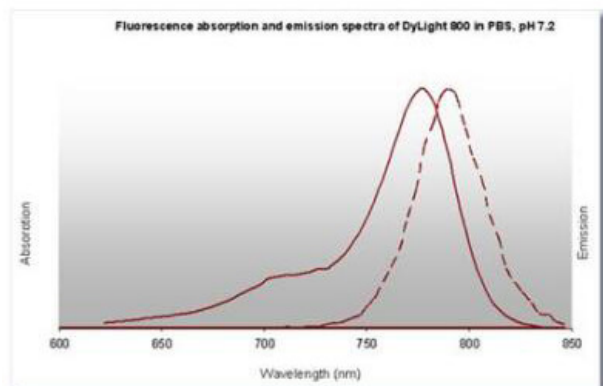
Western Blot

DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFα was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

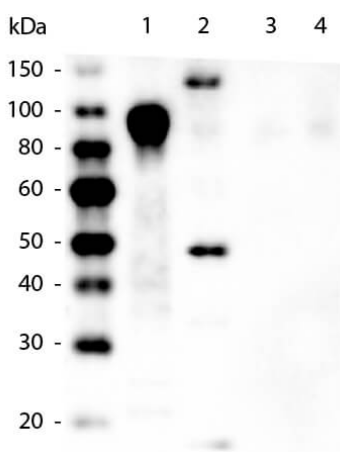


Western Blot

Western Blot showing detection of 6x HIS Epitope Tag. Lane 1: Molecular Weight Marker. Lane 2: Recombinant 6xHIS-SUMO-GFP. Lane 3: Nag1. Blocking with 5% Blotto (p/n B501-0500) 30 min at 20°C. Detection: Anti-6x His Epitope Tag (MOUSE) Monoclonal Antibody DyLight™ 800 Conjugated (p/n 200-345-382) secondary antibody was used at 1:5000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) and imaged on the LiCor Odyssey imaging system.



Diagram



Western Blot

Western Blot of Mouse anti-6xHIS Tag Antibody. Lane 1: 100ng Purified histidine-tagged recombinant protein. Lane 2: 200ng E. coli cell lysate containing histidine-tagged expression construct. Lane 3: 100ng Purified GST-tagged recombinant protein. Lane 4: 100ng Purified FLAG-tagged recombinant protein. Primary antibody: Mouse anti-6xHIS Tag antibody at 1:5,000 overnight at 4°C. Secondary antibody: Peroxidase mouse secondary antibody at 1:20,000 for 30 min at RT. Block: 5% BLOTTO for 1 hr at RT.

References

- Semwal S et al. Small-angle X-ray scattering of engineered antigen-binding fragments: the case of glycosylated Fab from the Mannitou IgM antibody. *Acta Crystallogr F Struct Biol Commun.* (2025)
- Parilova O et al. Determinants of transcription initiation efficiency and start site selection by RNA polymerase I. *bioRxiv [preprint]* (2024)
- Minnaert AK et al. Yeast-produced fructosamine-3-kinase retains mobility after ex vivo intravitreal injection in human and bovine eyes as determined by Fluorescence Correlation Spectroscopy. *Int J Pharm.* (2022)

Disclaimer

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