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Datasheet for 200-301-B90

6X His Tag Antibody

Overview

Description:	Anti-6X His Epitope Tag (MOUSE) Monoclonal Antibody - 200-301-B90
Item No.:	200-301-B90
Size:	1 mg
Applications:	ELISA, WB
Reactivity:	His-Tag
Host Species:	Mouse

Product Details

Background:	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 Antibody, anti-HIS, HIS Antibody, 6X His Tag Antibody, HHHHHH epitope tag antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	33D10.D2.G8
Format:	IgG1

Target Details

Reactivity:	His-Tag
Immunogen Type:	Conjugated Peptide
Immunogen:	6X HIS 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:	• 200-301-B90 SDS

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-6X His is optimally suited for monitoring expression of His-tagged fusion proteins. As such, Anti-6X His/6XHIS 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 antibody has been tested by ELISA and western blotting against both the immunizing peptide and His-containing recombinant proteins. Although not tested, this antibody is likely functional for immunoprecipitation and immunocytochemistry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:100,000
IHC:	User Optimized
WB:	1:2,000 - 1:10,000

Formulation

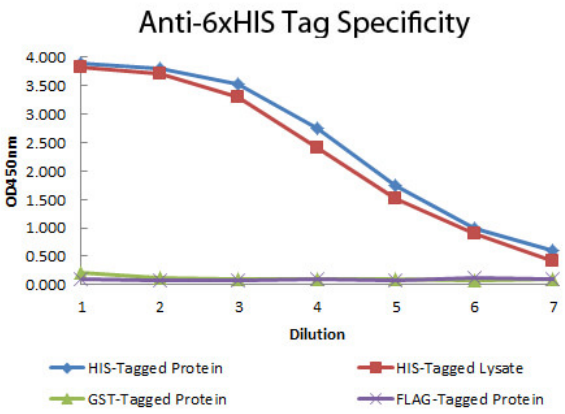
Physical State:	Liquid (sterile filtered)
Concentration:	1.03 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None

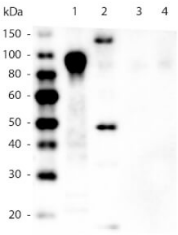
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store 6X HIS Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

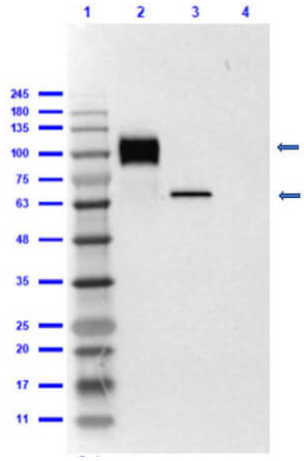
Images



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).



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.



Western Blot
Western Blot of Mouse Anti-6X HIS Epitope Tag Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: rec EGF -C-term HIS tag [0.02µg] [+]. Lane 3: rec Luciferase N-term HIS tag [0.10µg] [+]. Lane 4: Zic1 - C-myc/DDK Tag [0.10µg] [-]. Primary Antibody: Mouse Anti-6X HIS at 1.0µg/mL overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Mouse HRP (p/n 610-403-C46) at 1:40,000 for 30mins at RT. Block: BlockOut Buffer (p/m MB-073) for 1hr at RT. Bands are recognized at the expected MW. Exposure: 2sec.

References

- Üstüntanır Dede AF et al. Recombinant production of hormonally active human insulin from pre-proinsulin by Tetrahymena thermophila. *Enzyme Microb Technol.* (2023)

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