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Datasheet for 600-401-382

6X His Epitope Tag Antibody

Overview

Description:	Anti-6X His Epitope Tag (RABBIT) Antibody - 600-401-382
Item No.:	600-401-382
Size:	100 µg
Applications:	Dot Blot, ELISA, WB, Cellular Assay, ChIP, IHC, IP, Multiplex
Reactivity:	His-Tag
Host Species:	Rabbit

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:	rabbit anti-6X His Epitope Tag Antibody, anti-HIS, HIS Antibody, 6X His Tag Antibody, HHHHHH epitope tag antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	His-Tag

Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was purified from whole rabbit serum prepared by repeated immunizations with 6X His epitope tag peptide H-H-H-H-H-H conjugated to KLH using maleimide.
Purity/Specificity:	This affinity purified antibody is directed against the 6X His motif and is useful in determining its presence in various assays. This polyclonal 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.

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Suggested Applications:	Cellular Assay, ChIP, IHC, IP, Multiplex (Based on references)
Application Note:	Anti-6X His 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 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:	1:10,000 - 1:40,000
IHC:	1:500 - 1:2,000
WB:	1:500 - 1:1,000

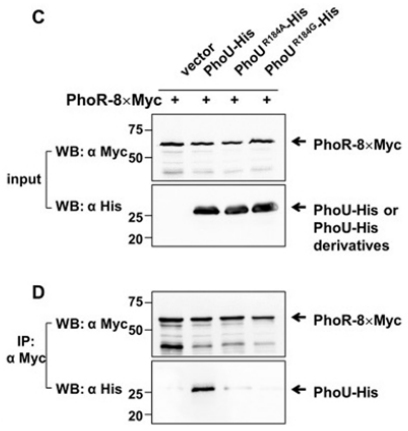
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.17 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

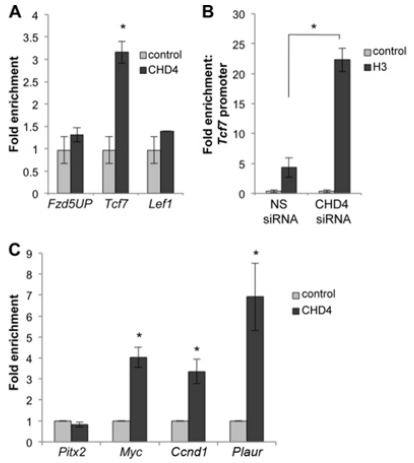
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial 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

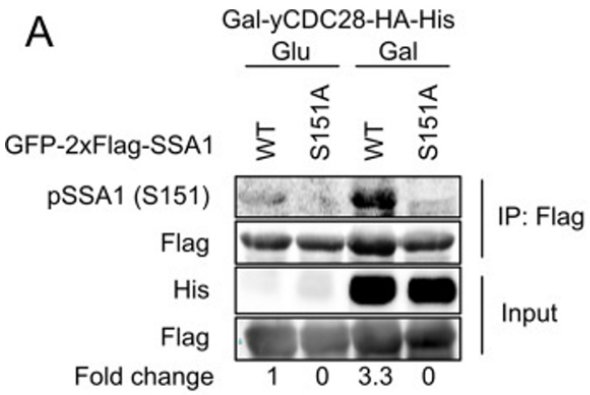


Western Blot
(C and D) The C-terminally 8×Myc-tagged PhoR protein immunoprecipitates PhoU-His. (C) Crude extracts prepared from Salmonella strains with the phoR-8×Myc gene expressing PhoU-His, PhoUR184A-His, PhoUR184G-His, or the empty vector (pBAD33) were detected with anti-Myc (top) and anti-His (bottom) antibodies. (D) Eluted fractions prepared from strains listed above were detected with anti-Myc (top) and anti-His (bottom) antibodies after immunoprecipitation with anti-Myc antibody-coated beads. Fig 4.
PMID: 35638741



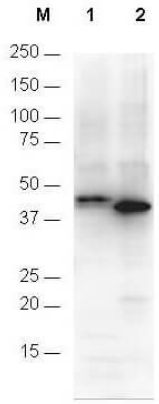
ChIP

CHD4 modulates vascular Wnt signaling at two levels. (A) Chromatin immunoprecipitation (ChIP) assays were performed using antibodies against CHD4 or a polyhistidine epitope tag as a negative control. DNA was isolated and amplified by qPCR to determine whether CHD4 bound the promoter region of Tcf7 or Lef1. (B) Chromatin harvested from nonspecific (NS) or CHD4 siRNA-transfected C166 yolk sac endothelial cells was immunoprecipitated with an antibody against histone H3 or a negative-control antibody (p/n 600-401-382). DNA was isolated and amplified by qPCR to examine the relative nucleosome density at the Tcf7 promoter. (C) Chromatin immunoprecipitation assays were carried out using antibodies against CHD4 or IgG (negative control) to determine whether CHD4 was associated with the promoter region of the Wnt target genes Pitx2, Myc, Ccnd1, and Plaur. (A to C) A region greater than 5 kb upstream of the Fzd5 transcription start site (Fzd5UP) was used as a negative control. Data from three independent experiments were combined and are presented as fold enrichment over the level with the negative-control antibody. Significant differences were calculated using a two-tailed Student t test (*, $P < 0.05$). Fig 5.
PMID: 22290435

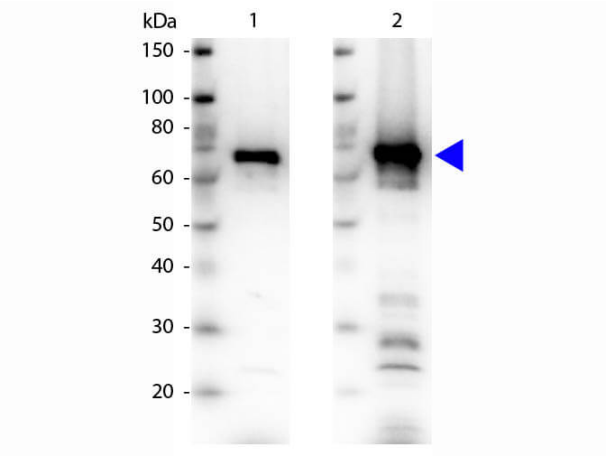


Western Blot

Ssa1 S151 phosphorylation is mediated by Cdk1 and regulated by the TOR pathway. (A) Δssa1-4 yeast cells expressing GFP-Flag-Ssa1 (WT) or GFP-Flag-Ssa1 S151A (S151A) as well as galactose-inducible HA-His-tagged Cdk1 (Gal-yCDC28-HA-His) were grown in glucose (Glu) or galactose (Gal). Ssa1 was isolated by immunoprecipitation and analyzed by Western blotting with anti-phospho-Hsp70(S151/153) (pSSA1), anti-His, and anti-Flag antibodies. Fig 3. PMID: 32205407



Western Blot
Anti-6X His epitope tag polyclonal antibody detects His-tagged recombinant proteins by western blot. Polyclonal rabbit



Western Blot
Western blot of Rabbit Anti-6xHIS Epitope Tag antibody. Lane: NFR1-HIS recombinant protein. Load: 50 ng per lane. Primary antibody - 1: NRF1 antibody at 1:1,000 overnight at 4°C. Primary antibody - 2: 6xHIS Epitope tag antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/observed size: 67 kDa, 67 kDa for NRF1-His tagged. Other band(s): None.

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