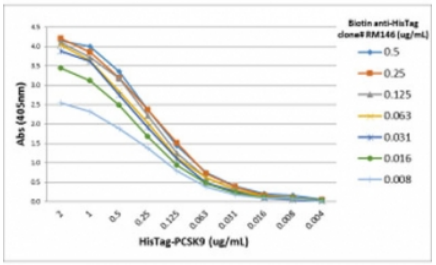
His Tag Antibody Biotin Conjugate [clone RM146] (R20255BTN)

Catalog No.	Formulation	Size
R20255BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

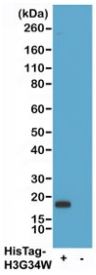
Recombinant RABBIT MONOCLONAL

Bulk quote request

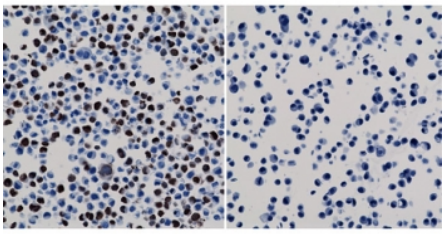
Availability	1-3 business days
Species Reactivity	Species independent
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM146
Purity	Protein A purified from animal origin-free supernatant
Applications	Western Blot: 0.1-0.5ug/ml Immunocytochemistry: 0.5-2ug/ml Flow Cytometry: 0.5-2ug/ml Immunohistochemistry: 0.1-1ug/ml (1) ELISA: 0.01ug/ml-0.5ug/ml
Limitations	This His Tag Antibody Biotin Conjugate is available for research use only.



His Tag Antibody Biotin Conjugate ELISA. A titration ELISA was performed using purified His-tagged PCSK9 recombinant protein immobilized on the plate. Serial dilutions of His Tag Antibody Biotin Conjugate clone RM146 (0.008-0.5 ug/mL) were applied as the primary detection reagent, followed by alkaline phosphatase-conjugated streptavidin. Optical density was measured at 405 nm. The biotinylated antibody demonstrates strong, concentration-dependent binding across the tested range, with signal intensity decreasing predictably as both antigen and antibody concentrations are reduced. These results demonstrate that this Biotin His Tag Antibody provides sensitive and reproducible detection of polyhistidine-tagged recombinant proteins in streptavidin-based ELISA applications.



His Tag Antibody Biotin Conjugate Human 293T Cell WB. Western blot analysis was performed using lysates from human HEK293T cells transfected (+) or untransfected (-) with a DNA construct encoding a His-tagged Histone H3 protein. His Tag Antibody Biotin Conjugate clone RM146 was used at 0.2 ug/mL, followed by HRP-conjugated streptavidin for detection. A distinct immunoreactive band corresponding to the His-tagged Histone H3 fusion protein is detected exclusively in the transfected sample, while the untransfected control shows no detectable signal. These results demonstrate that this Biotin His Tag Antibody provides highly specific detection of polyhistidine-tagged recombinant proteins by Western blot using a streptavidin-based detection system.



His Tag Antibody Biotin Conjugate Human 293T Cell ICC. Immunocytochemistry was performed using His Tag Antibody Biotin Conjugate clone RM146 on human HEK293T cells expressing a His-tagged nuclear protein (left) and negative control HepG2 cells lacking the tagged protein (right). Bound antibody was detected with streptavidin-HRP and DAB chromogen, followed by hematoxylin counterstaining. Strong nuclear staining is observed in the HEK293T cells expressing the His-tag fusion protein, while the negative control cells show no detectable staining. These results demonstrate that this Biotin His Tag Antibody provides specific detection of polyhistidine-tagged recombinant proteins in immunocytochemistry using a sensitive streptavidin-based detection system.

Description

His Tag Antibody Biotin Conjugate is designed for the sensitive detection of recombinant proteins carrying a polyhistidine affinity tag while providing the flexibility of biotin-streptavidin detection systems. The widely used His tag, typically composed of six consecutive histidine residues, enables efficient purification and universal detection of recombinant proteins produced in bacterial, yeast, insect, and mammalian expression systems. Biotin labeling allows this recombinant rabbit monoclonal antibody, clone RM146, to be paired with streptavidin-based detection reagents for enhanced assay versatility and signal amplification. NSJ Bioreagents provides this reagent for research applications requiring highly specific recognition of His-tagged recombinant proteins.

Biotin-conjugated antibodies are particularly valuable when investigators require flexible detection formats or wish to avoid species-specific secondary antibodies. Following binding of the His Tag Antibody Biotin Conjugate, streptavidin conjugated to horseradish peroxidase, alkaline phosphatase, fluorophores, or other reporter molecules can be selected according to the experimental design. This approach is commonly used in ELISA, immunohistochemistry, immunocytochemistry, Western blotting, flow cytometry, and multiplex immunoassays. Because the same polyhistidine epitope is shared by numerous recombinant proteins, a single biotinylated antibody can support diverse expression, purification, and characterization workflows.

Clone RM146 combines the advantages of recombinant rabbit monoclonal technology with the convenience of direct biotin conjugation. Recombinant production provides excellent lot-to-lot consistency while preserving the high affinity and specificity expected from rabbit monoclonal antibodies. The biotin label also simplifies assay development by reducing the number of incubation steps in many protocols and allowing straightforward integration into streptavidin-based detection systems. These features make the reagent well suited for applications involving recombinant protein validation, affinity purification studies, interaction analyses, and expression screening.

Whether confirming recombinant protein expression, developing sensitive immunoassays, or establishing streptavidin-based detection methods, His Tag Antibody Biotin Conjugate offers dependable recognition of polyhistidine-tagged proteins across multiple experimental platforms. Researchers seeking an unconjugated version for conventional secondary antibody detection can also explore our His Tag Antibody / Polyhistidine Tag Antibody page, featuring the same recombinant rabbit monoclonal clone RM146.

Application Notes

The stated application concentrations are suggested starting points. Titration of the His Tag Antibody Biotin Conjugate may be required due to differences in protocols and secondary/substrate sensitivity.

1. A pH6 Citrate buffer or pH9 Tris/EDTA buffer HIER step is recommended for testing of FFPE tissue sections.

Immunogen

Mixture of a peptide with 6xHis-Tag at the N-terminus and another peptide with 6xHis-Tag at the C-terminus was used as the immunogen for this biotinylated His Tag antibody.

Storage

Store the recombinant His Tag antibody at -20oC.

Alternate Names

Biotin His Tag antibody, Biotin Polyhistidine Tag antibody, Biotin Histidine Tag antibody, Biotin 6xHis Tag antibody, Biotin Hexahistidine Tag antibody, Biotin His6 Tag antibody, Biotin His Epitope Tag antibody, Biotin Poly-His Tag antibody

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