PRODUCT INFORMATION

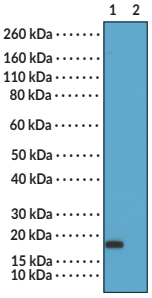
His-tag Rabbit Monoclonal Antibody - Biotinylated (Clone RM146)

Item No. 32379

Overview and Properties

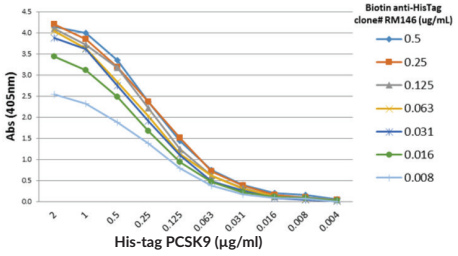
Contents:	This vial contains 50 µg of protein A-affinity purified monoclonal antibody.
Synonyms:	Deca-His Tag, Decahistidine Tag, Hexa-His Tag, Hexahistidine Tag, Poly-His Tag
Immunogen:	Mixture of a peptide with a 6x His tag at the N-terminus and a peptide with a 6x His tag at the C-terminus
Cross Reactivity:	(+) His-tagged proteins; (-) Endogenous mammalian or bacterial proteins
Species Reactivity:	Species Independent
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1 mg/ml
Clone:	RM146
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA, Flow Cytometry (FC), Immunocytochemistry (ICC), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting concentration for ELISA is 0.01-0.5 µg/ml, 0.5-2 µg/ml for FC and ICC, 0.1-1 µg/ml for IHC, and 0.1-0.5 µg/ml for WB. Other applications were not tested, therefore optimal working concentration/ dilution should be determined empirically.

Images

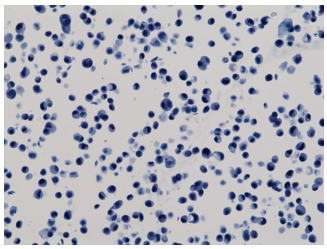


Lane 1: 293T cells transfected
Lane 2: 293T cells untransfected

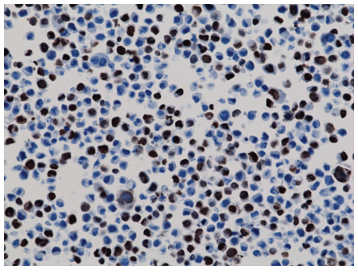
WB of 293T cells transfected with DNA construct encoding His-tag Histone H3 (G34W) protein or left untransfected using His-tag Rabbit Monoclonal Antibody - Biotinylated Clone (RM146) at a concentration of 0.2 µg/ml, followed by an HRP-conjugated streptavidin.



A Titer ELISA using His-tag Rabbit Monoclonal Antibody - Biotinylated. The plate was coated with different amounts of His-tag PCSK9. A serial dilution of His-tag Rabbit Monoclonal Antibody - Biotinylated (Clone RM146) was used as the primary antibody and an alkaline phosphatase-conjugated streptavidin was used as the secondary antibody.



Immunohistochemical staining of naïve HepG2 cells (negative control) using His-tag Rabbit Monoclonal Antibody - Biotinylated (Clone RM146).



Immunohistochemical staining of 293T cells expressing His-tag nuclear protein X using His-tag Rabbit Monoclonal Antibody - Biotinylated (Clone RM146).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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PRODUCT INFORMATION

Description

His-tag Monoclonal Antibody - Biotinylated is a probe for the immunochemical detection of histidine tags on recombinant proteins. Recombinant proteins are commonly labeled with affinity tags, such as 6-10 histidine residues (6x-10x His), to facilitate both their detection and purification.[1] Poly-His tags are commonly utilized because of their small size, low potential to interfere in protein folding or activity, weak immunogenicity, and high affinity for transition metal ion matrices, such as Ni^{2+}, used in immobilized metal-affinity chromatography (IMAC) for protein purification.[1,2]. Cayman's His-tag Rabbit Monoclonal Antibody - Biotinylated Clone (RM146) can be used for ELISA, flow cytometry (FC), immunocytochemistry (ICC), immunohistochemistry (IHC), and Western blot (WB) applications. The antibody recognizes proteins containing 6x or 10x His tags fused to either the N- or C-terminus.

References

1. Terpe, K. Overview of tag protein fusions: From molecular and biochemical fundamentals to commercial systems. *Appl. Microbiol. Biotechnol.* **60(5)**, 523-533 (2003).
2. Spriestersbach, A., Kubicek, J., Schäfer, F., *et al.* Purification of His-tagged proteins. *Methods in Enzymology*. Lorsch, J.R., editor, 1st edition, *Academic Press* (2015).

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