

Product datasheet

Anti-6X His tag® antibody [4D11] ab5000

★★★★☆ 4 Abreviews 16 References 4 Images

Overview

Product name	Anti-6X His tag® antibody [4D11]
Description	Mouse monoclonal [4D11] to 6X His tag®
Host species	Mouse
Specificity	This antibody recognises all proteins which contain either an N or C-terminal HHHHHHGS epitope tag. It has been shown by a reviewer to recognise HHHHHH alone.
Tested applications	Suitable for: Dot blot, ELISA, WB, IP, ICC/IF, Other, Flow Cyt
Species reactivity	Reacts with: Species independent
Immunogen	Recombinant malaria protein TRAP fused at the amino-terminal end with six His tag. The coding sequence of TRAP 1.0 was amplified from <i>P. falciparum</i> genomic DNA (ITO4 isolate) in standard Polymerase Chain Reaction PCR (Saiki et al. 1988) using the primer combination trap 1 5'-AGTTGGATCCAGAGATGTGCAAAACA ATATAGTGG-3' and trap 2 5'-GCGAGTAAAGCTAAGCTTCCAGCTATTCCACCTGC-3', the amplified DNA sequence was cloned in the vector pDS56/RBSII,6xHis (Hochuli et al. 1988).
Epitope	This antibody was shown to recognize an epitope (HHHHHHGS) encoded by the polylinker of several expression vectors (including pDS:RBSII, pQE-30, and pQE-50).
Positive control	<div style="border: 1px solid #ccc; padding: 5px; background-color: #f9f9f9;"> <p>Purchase matching WB positive control: ENO1 full length protein ></p> </div>
General notes	<p>This antibody clone is manufactured by Abcam.</p> <p>HIS-TAG® is a trademark of EMD Biosciences, Inc.</p> <p>If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com or you can find further information here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Add glycerol to a final volume of 50% for extra stability and aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 6.97% L-Arginine, PBS</p>

Purity	IgG fraction
Clonality	Monoclonal
Clone number	4D11
Myeloma	NS1
Isotype	IgG2a
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab5000** in the following tested applications.

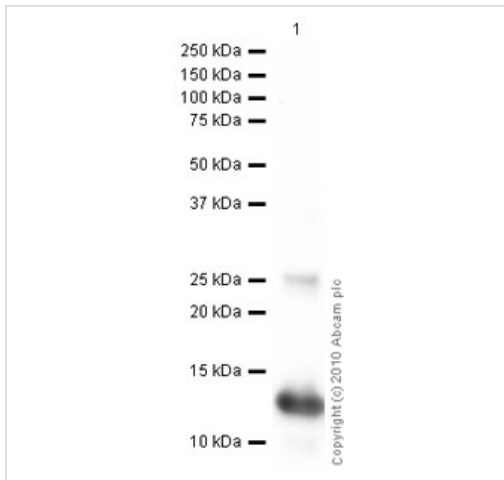
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
AP		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.
WB	★★★★☆	1/1000.
IP	★★★★☆	Use at an assay dependent concentration. See Abreview.
ICC/IF	★★★★★	Use at an assay dependent concentration.
Other		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

Relevance	The H-H-H-H-H-H motif is used as a tag on many recombinant proteins to facilitate purification. The antibody recognizes the His-tag fused to the amino- or carboxy- termini of targeted proteins in transfected or transformed cells.
Cellular localization	Depends upon the localization of the parent protein tagged with hexahistidine.

Images



Western blot - Anti-6X His tag® antibody [4D11] (ab5000)

Anti-6X His tag® antibody [4D11] (ab5000) at 1/1000 dilution + 6X His Tagged Protein at 1 µg

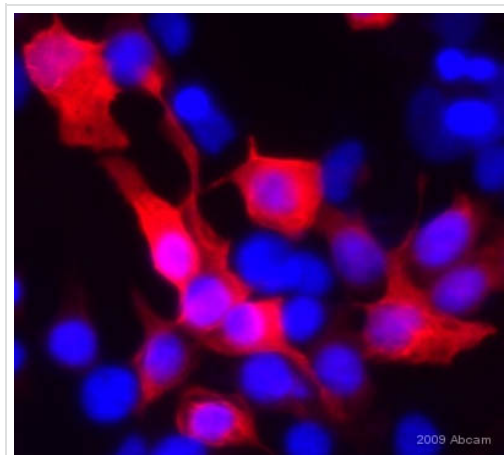
Secondary

Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) (ab65485) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

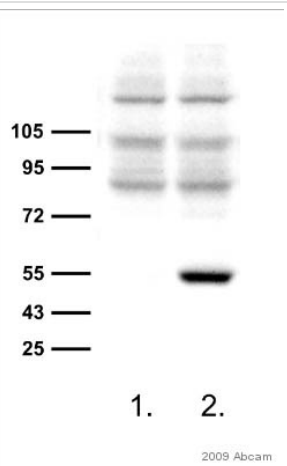
Exposure time: 30 seconds



Immunocytochemistry/ Immunofluorescence - Anti-6X His tag® antibody [4D11] (ab5000)

This image is courtesy of an Abreview submitted by Dr Madimir Mlenkovic

ab5000 staining Human HEK 293 cells transfected with CACNB3-His by ICC/IF. Cells were PFA fixed and permeabilized in 0.5% Triton X-100 prior to blocking in 5% serum for 20 minutes at 25°C. The primary antibody (1/250 in 1% goat serum, 0.1% TX100, 1X PBS) was incubated with the sample for 16 hours at 4°C. An Alexa Fluor® 546 conjugated goat anti-mouse antibody (1/500) was used as the secondary. DAPI was used for nuclei staining (blue).



All lanes : Anti-6X His tag® antibody [4D11] (ab5000) at 1/2000 dilution

Lane 1 : Lysates prepared from HEK-293 cells

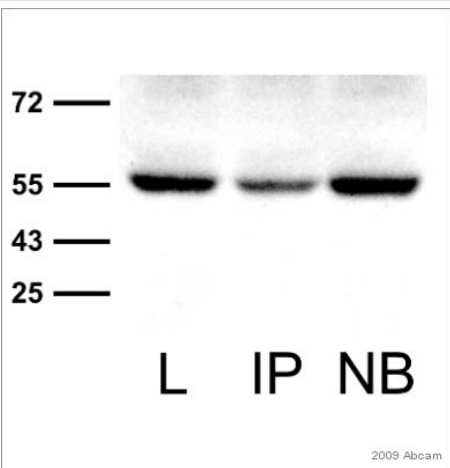
Lane 2 : Lysates prepared from HEK-293 cells transfected with Beta3-His (CACNB3)

Secondary

All lanes : HRP-conjugated goat anti-mouse IgG polyclonal at 1/5000 dilution

Western blot - Anti-6X His tag® antibody [4D11] (ab5000)

This image is courtesy of an Abreview submitted by Dr Madimir Milenkovic



ab5000 Immunoprecipitate in human HEK293 whole cell lysate. 25µg of cell lysate incubated with primary antibody (undiluted) and matrix (Protein G) for 16 hours at 4°C. For western blotting an undiluted HRP-Goat anti-rabbit IgG polyclonal was used. Beta3-His fusion protein was immunoprecipitated using anti His Ab, and specific beta3a band (56kDa) was detected using anti beta3 Ab

Lane 1. Lysate of HEK293 cells expressing beta3-His (CACNB3)

Lane 2. IP with anti His Ab

Lane 3. Non bound fraction

Immunoprecipitation - Anti-6X His tag® antibody [4D11] (ab5000)

This image is courtesy of an Abreview submitted by Dr Madimir Milenkovic

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