

# His-Tag Polyclonal Antibody

100 µl  
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Source
W, IP, IF-IC Transfected	All	Rabbit**

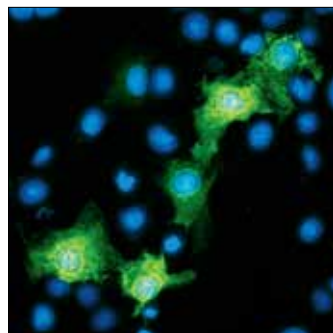
**Background:** Epitope tags are useful for the labeling and detection of proteins using immunoblotting, immunoprecipitation and immunostaining techniques. Due to their small size, they are unlikely to affect the tagged protein's biochemical properties. A variety of plasmids contain DNA that encodes an amino-terminal tag consisting of six histidine (6xHis) residues followed by an extended multiple cloning site. The 6xHis tag on the expressed recombinant proteins allows for efficient coupling to Ni<sup>2+</sup> affinity resins and purification by single step chromatography (1). As is the case with other protein tag systems (2), this polyhistidine tag can often be cleaved at sites recognized by proteases such as thrombin and enterokinases to isolate the protein of interest (1).

**Specificity/Sensitivity:** His-Tag Polyclonal Antibody detects His-tagged recombinant proteins.

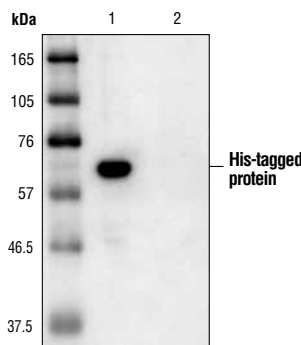
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a 6xHis synthetic peptide. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

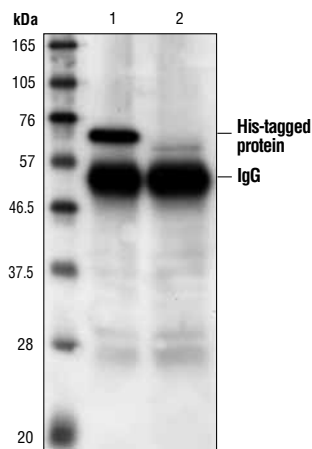
- (1) Kroll, D.J. et al. (1993) *DNA Cell Biol.* 12, 441–453.
- (2) di Guan, C. et al. (1988) *Gene* 67, 21–30.



Confocal immunofluorescent analysis of COS cells transfected with a His-tagged protein using His-Tag Polyclonal Antibody. Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



Western blot analysis of extracts from cells expressing carboxy-terminal His-tagged protein (lane 1) or control extract (lane 2), using His-Tag Polyclonal Antibody.



Immunoprecipitation of carboxy-terminal His-tagged protein (lane 1) or amino-terminal HA-tagged protein (lane 2), using His-Tag Polyclonal Antibody, then western analysis with the same antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting	1:1000
Immunoprecipitation	1:25
Immunofluorescence (IF-IC)	1:100
IF Protocol:	Methanol Permeabilization Required

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

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**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.