

M30111

# His-Tag (10E2) mAb



**Orders** ■ 400-6123-828  
orders@ab-mart.com

**Web** ■ www.ab-mart.com.cn

- 50 µl (25 Western mini-blot)
- 100 µl (50 Western mini-blot)
- 200 µl (100 Western mini-blot)

## BACKGROUND

Plasmid vectors for the expression of coding regions of eukaryotic genes in bacterial, insect and mammalian hosts are in common usage; such expression vectors are frequently used to encode hybrid fusion proteins consisting of a eukaryotic target protein and a specialized region designed to aid in the purification and visualization of the target protein. A system that has proven to be very successful relies on the insertion of a six histidine (His6) sequence in the N-terminus of the encoded protein, allowing for efficient coupling to Ni<sup>2+</sup>-chelating resins and purification by single step affinity chromatography. This polyhistidine sequence can then be removed by specific cleavage at sites recognized by enzymes such as thrombin or enterokinase, permitting the separation of the target protein from the polyhistidine tag. Visualization of such fusion proteins can be achieved by utilizing antibodies generated against specific peptide sequences downstream from the multiple cloning site.

## REFERENCES

- Maniatis, T., et al. 1982. Molecular Cloning. Cold Spring Laboratory, Cold Spring Harbor, NY.
- Hochuli, E. 1988. Large-scale chromatography of recombinant proteins. J. Chromatog. 444: 293-302.

## SOURCE

This Abmart monoclonal antibody is produced by immunizing mice with a 6× His synthetic peptide (KLH-coupled).

## SPECIFICITY

His-Tag (10E2) Mouse mAb detects over-expressed or recombinant proteins containing the 6× His epitope tag.

## STORAGE

Store at -20°C. Stable for one year from the date of shipment.

## REACTIVITY

All

## ISOTYPE

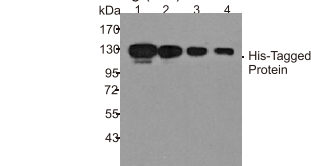
Mouse IgG1

## RECOMMENDED ANTIBODY DILUTIONS

Western blotting	1:5000
Immunofluorescence	1:1000
Immunoprecipitation	1:100
ELISA	1:2000

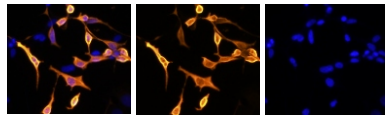
## APPLICATION DATA

### 1. Western blotting (WB)



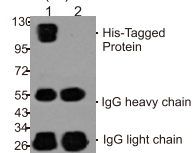
Western blot analysis of over-expressed His-tagged protein in 293T cell lysate, using Abmart His-tag (10E2) Mouse mAb. The antibody dilutions are: 1:1000 (lane 1), 1:5000 (lane 2), 1:10000 (lane 3) and 1:20000 (lane 4). Each lane was loaded with 30 µg

### 2. Immunofluorescence (IF)



IF analysis of 293T cells transfected with a His-tagged protein, Red: anti-His(10E2), Blue: DAPI

### 3. Immunoprecipitation (IP)



IP of extracts from 293T cells transfected (lane 1) with a His-tagged protein and a mock transfection (lane 2), using the same protein without the His tag, using Abmart His-Tag (10E2) Mouse mAb and probed on Western blot using the same antibody. Dilution: 1:100 (1), 1:100 (2).

## COMPANION PRODUCTS

#M21001 Goat Anti-Mouse IgG-HRP

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

For application specific protocols please see the web page at [www.abmart.com.cn/document.aspx](http://www.abmart.com.cn/document.aspx)

**Applications Key:** WB—Western blot, IP—Immunoprecipitation, IHC—Immunohistochemistry, ChIP—Chromatin Immunoprecipitation,

**Reactivity Key:** H—human, M—mouse, R—rat, CHm—Chinese hamster, Mk—monkey, C—chicken, Dm—D. melanogaster, X—Xenopus, Z—zebrafish, B—bovine, Dg—dog, Pg—pig, Sc—S. cerevisiae, Ce—C. Elegans, Hr—Horse

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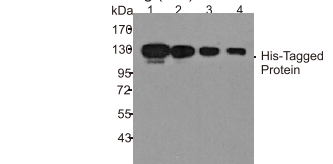
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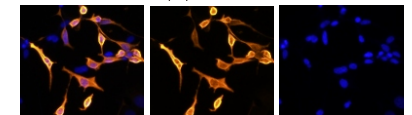
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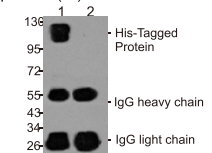
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