

## Product datasheet

# Anti-6X His tag® antibody [EPR20547] - ChIP Grade ab213204

Recombinant RabMAb

★☆☆☆☆ [1 Abreviews](#) [14 References](#) [10 Images](#)

### Overview

<b>Product name</b>	Anti-6X His tag® antibody [EPR20547] - ChIP Grade
<b>Description</b>	Rabbit monoclonal [EPR20547] to 6X His tag® - ChIP Grade
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IP, Flow Cyt, ChIP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Recombinant fragment
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: His-tagged mouse Cathepsin D and CDKN2A/p16INK4a proteins; HEK-293T transfected with His-tagged Staphylococcus aureus cas9, human Brachyury, human PRDM9 and human GAPDH cell lysates. IHC-P: HEK-293T cells transfected with His-tagged S.aureus cas9. ICC/IF: HEK-293T cells transfected with GFP-Myc-His. Flow Cyt: HEK-293T cells transfected with GFP-Myc-His. IP: HEK-293T cells transfected with His-tagged S.aureus cas9 cell lysate. ChIP: Chromatin from MCF7 cells transfected with 6X His-tagged GATA3.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol, PBS

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20547
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab213204 in the following tested applications.

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

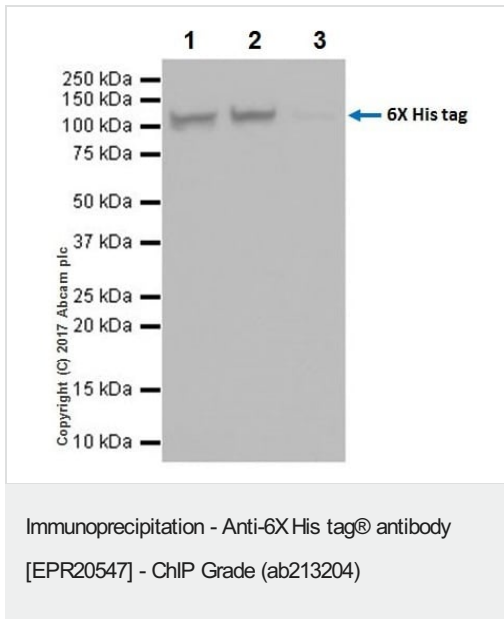
Application	Abreviews	Notes
WB		1/5000.
ICC/IF		1/100.
IP		1/30.
Flow Cyt		1/5000.
ChIP		Use 2 µg for 25 µg of chromatin.
IHC-P		1/16000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. We don't recommend this antibody for mouse in IHC. In our hands mouse tissues showed non-specific staining.

## Target

**Relevance** The H-H-H-H-H-H motif is used as a tag on many recombinant proteins to facilitate purification. His-tags can be fused to the amino- or carboxy- termini of proteins in transfected or transformed cells.

**Cellular localization** Depends upon the localization of the parent protein tagged with hexahistidine.

## Images



His-tagged *Staphylococcus aureus* cas9 was immunoprecipitated from 0.35 mg of HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with a His-tagged *Staphylococcus aureus* cas9 (J7RUA5; aa1-1053; 125 kDa) construct, whole cell lysate with ab213204 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab213204 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10,000 dilution

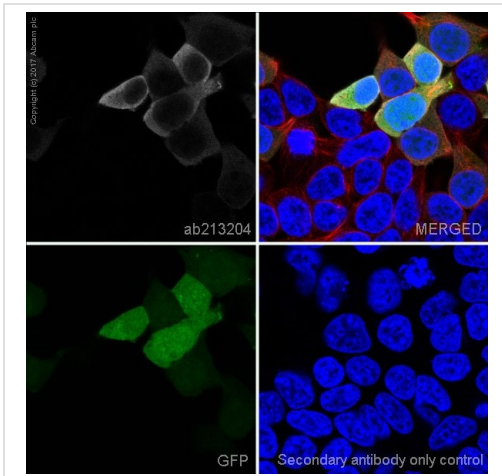
Lane 1: HEK-293T transfected with His-tagged *Staphylococcus aureus* cas9 construct, whole cell lysate 10 µg (Input).

Lane 2: ab213204 IP in HEK-293T transfected with His-tagged *Staphylococcus aureus* cas9 construct, whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab213204 in HEK-293T transfected with His-tagged *Staphylococcus aureus* cas9 construct, whole cell lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 1 second.

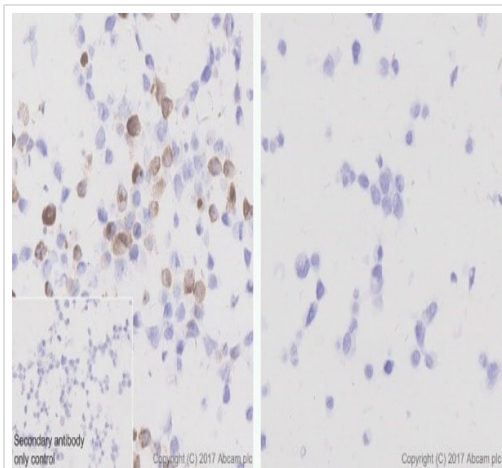


Immunocytochemistry/ Immunofluorescence - Anti-6X His tag<sup>®</sup> antibody [EPR20547] - ChIP Grade (ab213204)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with GFP-Myc-His vector expression construct labeling 6X His tag<sup>®</sup> with ab213204 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (white). Confocal image showing positive staining on HEK-293T cells transfected with GFP-Myc-His vector expression construct.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-6X His tag<sup>®</sup> antibody [EPR20547] - ChIP Grade (ab213204)

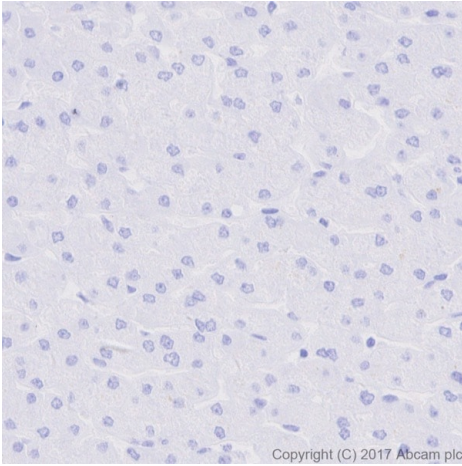
Immunohistochemical analysis of agarose-embedded HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with a His-tagged Staphylococcus aureus cas9 (J7RUA5; aa1-1053; 125kDa) construct labeling 6X His tag<sup>®</sup> with ab213204 at 1/16000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

**Left image:** Positive staining on HEK-293T transfected with a His-tagged Staphylococcus aureus cas9 (J7RUA5; aa1-1053; 125kDa) construct. **Right image:** No staining on HEK-293T transfected with an empty expression vector.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

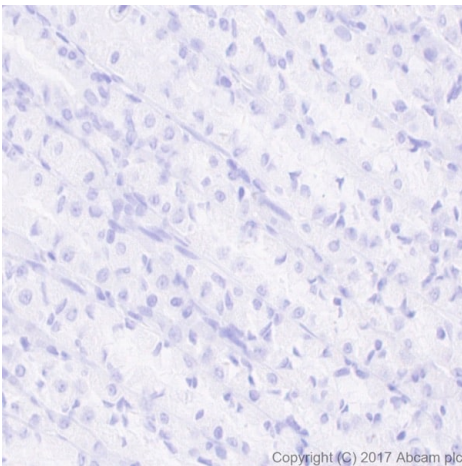


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling 6X His tag® with ab213204 at 1/16000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**Negative control:** No staining on human liver.

Counter stained with Hematoxylin.

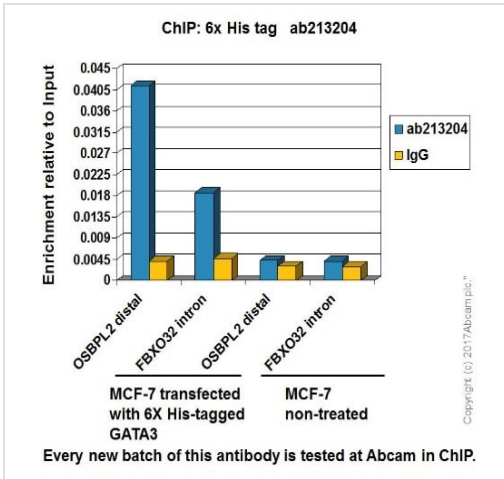


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

Immunohistochemical analysis of paraffin-embedded rat stomach tissue labeling 6X His tag® with ab213204 at 1/16000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**Negative control:** No staining on rat stomach.

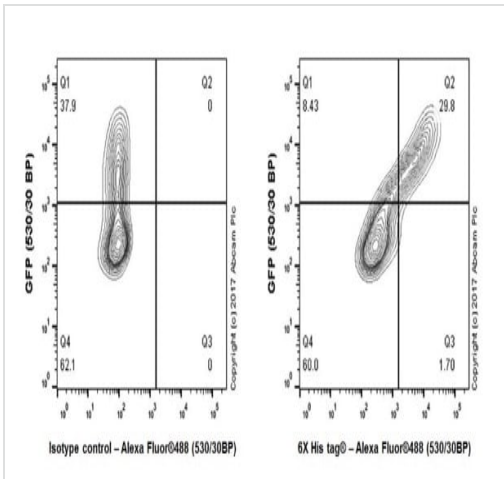
Counter stained with Hematoxylin.



ChIP - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

Chromatin was prepared from MCF7 (human breast adenocarcinoma cell line) cells transfected with 6X His-tagged GATA3 according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25µg of chromatin, 2µg of ab213204 (blue), and 20µl of A/G sepharose beads slurry (10µl of sepharose A beads + 10µl of sepharose G beads). 2µg of rabbit normal IgG was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

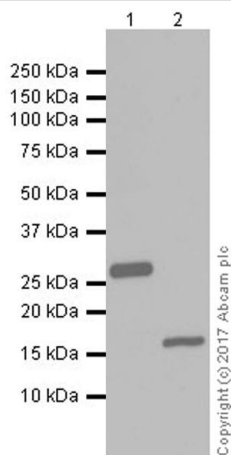
ChIP was performed according to the literature (PMID:22951069).



Flow Cytometry - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with GFP-Myc-His vector labeling 6X His tag® with ab213204 (right panel) at 1/5000 dilution compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (left panel). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) (**ab150079**) at 1/2000 dilution was used as the secondary antibody.

Gate is set between transfected and untransfected HEK-293T cells.



Western blot - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

**All lanes :** Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) at 1/20000 dilution

**Lane 1 :** His-tagged mouse Cathepsin D recombinant protein (aa65-310; 27kDa)

**Lane 2 :** His-tagged mouse CDKN2A/p16INK4a recombinant protein (aa1-168;18kDa)

Lysates/proteins at 0.02 µg per lane.

### Secondary

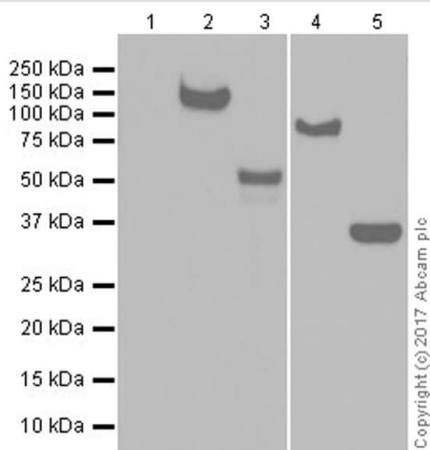
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

**Observed band size:** 18,27 kDa

**Exposure time:** 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204)

**All lanes :** Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) at 1/5000 dilution

**Lane 1 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with an empty expression vector, whole cell lysate

**Lane 2 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with a His-tagged Staphylococcus aureus cas9 (J7RUA5; aa1-1053;125kDa) construct, whole cell lysate

**Lane 3 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with a His-tagged human Brachyury (O15178; aa1-435;50kDa) construct, whole cell lysate

**Lane 4 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with a His-tagged human PRDM9 (Q9NQV7; aa1-894;100kDa) construct, whole cell lysate

**Lane 5 :** HEK-293T (human epithelial cell from embryonic kidney transformed with large T antigen) transfected with a His-tagged

human GAPDH (P04406; aa1- 335;36kDa) construct, whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

**Observed band size:** 100,125,36,50 kDa

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure time: Lane 1-3: 1 second; Lane 4-5: 10 seconds.

Why choose a recombinant antibody?

Research with confidence  
Consistent and reproducible results

Long-term and scalable supply  
Recombinant technology

Success from the first experiment  
Confirmed specificity

Ethical standards compliant  
Animal-free production

Anti-6XHis tag® antibody [EPR20547] - ChIP Grade (ab213204)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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