abcam

ab307891

Anti-SUZ12 antibody [EPR26230-82]

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR26230-82
Purification technique	Affinity purification Protein A
Concentration	0.493 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse

Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/200 - 1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/200 - 1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ChIP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information SUZ12

Function	Polycomb group (PcG) protein. Component of the PRC2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) of histone H3, leading to transcriptional repression of the affected target gene (PubMed:15225548, PubMed:15231737, PubMed:15385962, PubMed:16618801, PubMed:17344414, PubMed:18285464, PubMed:28229514, PubMed:29499137, PubMed:31959557). The PRC2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems (PubMed:12351676, PubMed:12435631, PubMed:15099518, PubMed:15225548, PubMed:15385962, PubMed:15684044, PubMed:16431907, PubMed:18086877, PubMed:18285464). Genes repressed by the PRC2 complex include HOXC8, HOXA9, MYT1 and CDKN2A (PubMed:15231737, PubMed:16618801, PubMed:17200670, PubMed:31959557).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

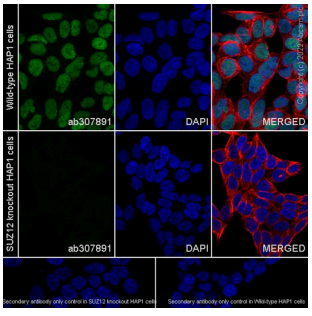
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

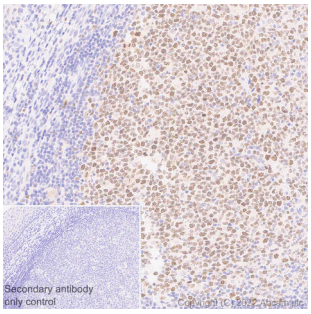
Full details and terms and conditions can be found here:
Terms & Conditions.

12 product images



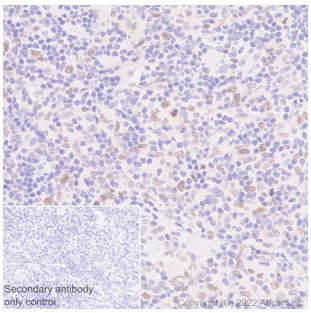
Immunocytochemistry/ Immunofluorescence - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SUZ12 KO HAP1 (human chronic myelogenous leukemia near-haploid cell) cells labeling SUZ12 with ab307891 at 1/50 dilution (9.86 ug/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 ug/mL) (Green). Confocal image showing nuclear staining in parental HAP1 cells. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 ug/ml) (Red). Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/mL).



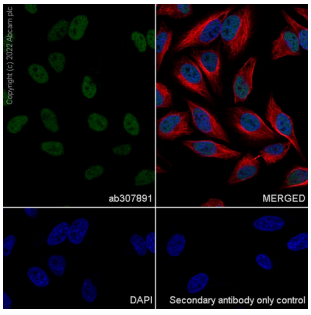
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling SUZ12 with ab307891 at 1/200 dilution (2.465 µg/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining in human tonsil germinal center (PMID: 20558579). The section was incubated with ab307891 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



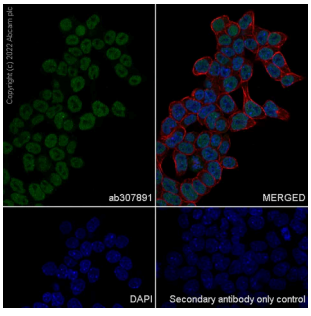
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunohistochemical analysis of paraffin-embedded human diffuse large B-cell lymphoma tissue labeling SUZ12 with ab307891 at 1/200 dilution (2.465 µg/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining in human diffuse large B-cell lymphoma (PMID: 20558579). The section was incubated with ab307891 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



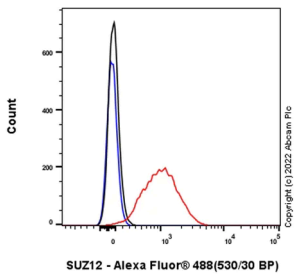
Immunocytochemistry/ Immunofluorescence - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cells labeling SUZ12 with ab307891 at 1/50 dilution (9.86 ug/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 ug/mL) (Green). Confocal image showing nuclear staining in HeLa cell line. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 ug/ml) (Red). Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/mL).



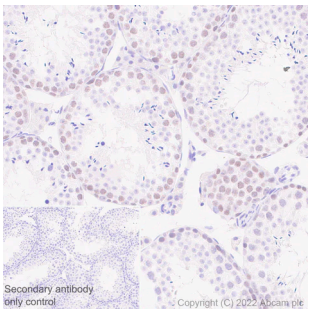
Immunocytochemistry/ Immunofluorescence - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized F9 (mouse embryonal carcinoma epithelial cell) cells labeling SUZ12 with ab307891 at 1/50 dilution (9.86 ug/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 ug/mL) (Green). Confocal image showing nuclear staining in F9 cell line. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 ug/ml) (Red). Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/mL).



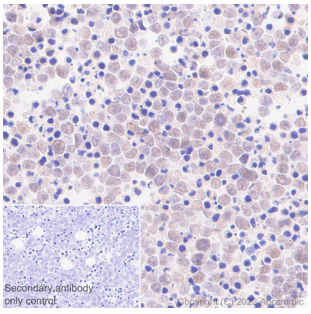
Flow Cytometry (Intracellular) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized F9 (mouse embryonal carcinoma epithelial cell) cells labeling SUZ12 with ab307891 at 1/50 dilution (1 ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



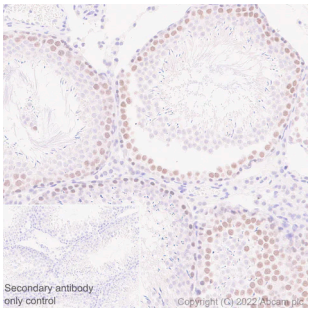
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling SUZ12 with ab307891 at 1/1000 dilution (0.493 ug/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining in mouse testis. The section was incubated with ab307891 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



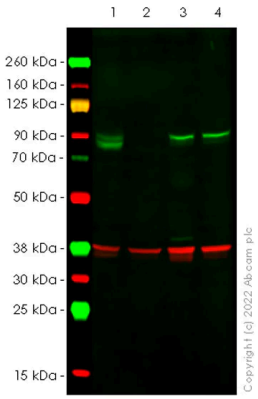
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunohistochemical analysis of paraffin-embedded mouse large B-cell lymphoma tissue labeling SUZ12 with ab307891 at 1/1000 dilution (0.493 ug/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining in mosue large B-cell lymphoma. The section was incubated with ab307891 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling SUZ12 with ab307891 at 1/1000 dilution (0.493 ug/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining in rat testis. The section was incubated with ab307891 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Western blot - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

SUZ12 Western blot staining using rabbit Anti-SUZ12 antibody

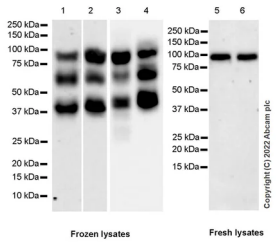
Lysates at 20 µg per lane. The samples were run on a Bis-Tris gel. Performed under reducing conditions. False colour image of Western blot: Anti-SUZ12 antibody (ab307891) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody 6C5 (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab307891 was shown to bind specifically to SUZ12. A band was observed at 95 kDa in wild-type HAP1 cell lysates with no signal observed at this size in SUZ12 knockout cell line. To generate this image, wild-type and SUZ12 knockout HAP1 cell lysates were analyzed. First, samples were run on an SDS-PAGE gel then transferred onto an immobilon-FL PVDF membrane. Membranes were blocked in in Intercept® (TBS) Blocking Buffer diluted with an equal volume of 0.1% TBS before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.
Lane 1:
Wild-type HAP1(human chronic myelogenous leukemia near-haploid cell line) whole cell lysate at 20 µg

Lane 2:
SUZ12 knockout HAP1 whole cell lysate at 20 µg

Lane 3:
HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
Caco-2 (human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Predicted band size: 83 kDa



Western blot - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

SUZ12 Western blot staining using rabbit Anti-SUZ12 antibody

Blocking/Dilution buffer: 5% NFDM/TBST. Exposure times: Lane 1 and 2: 3 minutes Lane 3 and 4: 114 seconds Lane 5-6: 3 minutes Lysates of lane 5 and 6 were freshly made and used immediately to minimize protein degradation. The blot of lane 5-6 were developed using a high sensitivity ECL substrate. The lower bands in lane 1-4 may be caused by degradation.
All lanes:
Western blot - Anti-SUZ12 antibody [EPR26230-82] (ab307891) at 1/1000 dilution

Lane 1:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Lane 3:
C6 (rat glial tumor glial cell) whole cell lysate at 20 µg

Lane 4:
F9 (mouse embryonal carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
C6 whole cell lysate at 20 µg

Lane 6:

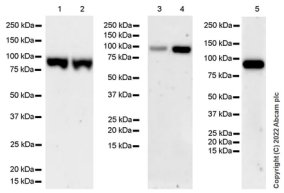
Neuro-2a whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

Observed band size: 95 kDa



Western blot - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

Blocking/Dilution buffer: 5% NFDM/TBST. Exposure times: Lane1 and 2: 81 seconds Lane 3-5: 3 minutes Lysates were freshly made and used immediately to minimize protein degradation. The blot of lane 3-5 were developed using a high sensitivity ECL substrate.
All lanes:
Western blot - Anti-SUZ12 antibody [EPR26230-82] (ab307891) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 2:
NIH/3T3 (mouse embryonic fibroblast), whole cell lysate at 20 µg

Lane 3:
U-87 MG (human glioblastoma-astrocytoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
NCCIT (human pluripotent embryonic carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 95 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.