abcam

Product datasheet

Anti-SUZ12 antibody [EPR26230-82] ab307891

KO VALIDATED Recombinant RabMAb

13 Images

Overview

Product name	Anti-SUZ12 antibody [EPR26230-82]
Description	Rabbit monoclonal [EPR26230-82] to SUZ12
Host species	Rabbit
Specificity	Unsuitable for human FC-Intra.
Tested applications	**Suitable for:** ICC/IF, Flow Cyt (Intra), IHC-P, WB **Unsuitable for:** ChIP or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type HAP1 whole cell lysate. HeLa, 293T, NIH/3T3, U-87 MG, SH-SY5Y, NCCIT, Neuro-2a, C6, F9 and Caco-2 whole cell lysate. IHC-P: Human tonsil tissue. Human diffuse large B-cell lymphoma. Mouse and rat testis tissue. Mouse large B-cell lymphoma. ICC/IF: Wild-type HAP1 cells. HeLa and F9 cells. Flow Cyt (Intra): F9 cells.
General notes	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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR26230-82
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab307891 in the following tested applications.

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

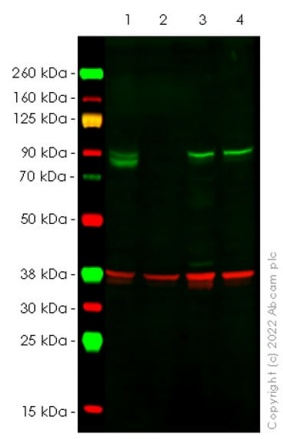
Application	Abreviews	Notes
ICC/IF		1/50.
Flow Cyt (Intra)		1/50.
IHC-P		1/200 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 83 kDa.

Application notes Is unsuitable for ChIP or IP.

Target

Function	Polycomb group (PcG) protein. Component of the PRC2/EED-EZH2 complex, which methylates 'Lys-9' (H3K9me) and 'Lys-27' (H3K27me) of histone H3, leading to transcriptional repression of the affected target gene. The PRC2/EED-EZH2 complex may also serve as a recruiting platform for DNA methyltransferases, thereby linking two epigenetic repression systems. Genes repressed by the PRC2/EED-EZH2 complex include HOXC8, HOXA9, MYT1 and CDKN2A.
Tissue specificity	Overexpressed in breast and colon cancer.
Involvement in disease	Note=A chromosomal aberration involving SUZ12 may be a cause of endometrial stromal tumors. Translocation t(7;17)(p15;q21) with JAZF1. The translocation generates the JAZF1-SUZ12 oncogene consisting of the N-terminus part of JAZF1 and the C-terminus part of SUZ12. It is frequently found in all cases of endometrial stromal tumors, except in endometrial stromal sarcomas, where it is rarer.
Sequence similarities	Belongs to the VEFS (VRN2-EMF2-FIS2-SU(Z)12) family. Contains 1 C2H2-type zinc finger.
Developmental stage	Expressed at low levels in quiescent cells. Expression rises at the G1/S phase transition.
Cellular localization	Nucleus.

Images



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

All lanes : Anti-SUZ12 antibody [EPR26230-82] (ab307891) at 1/1000 dilution

Lane 1 : Wild-type HAP1(human chronic myelogenous leukemia near-haploid cell line) whole cell lysate
Lane 2 : SUZ12 knockout HAP1 whole cell lysate
Lane 3 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 4 : Caco-2 (human colorectal adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

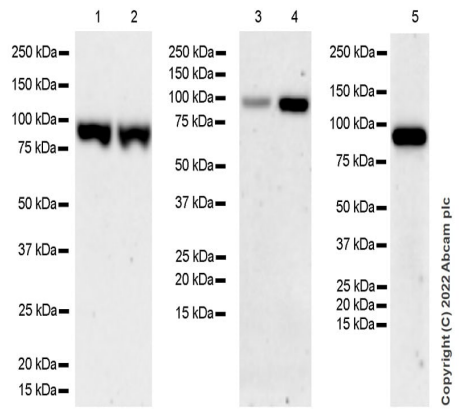
Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 83 kDa

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.



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

All lanes : Anti-SUZ12 antibody [EPR26230-82] (ab307891) at 1/1000 dilution

Lane 1 : 293T (human embryonic kidney epithelial cell) whole cell lysate
Lane 2 : NIH/3T3 (mouse embryonic fibroblast), whole cell lysate
Lane 3 : U-87 MG (human glioblastoma-astrocytoma epithelial cell) whole cell lysate
Lane 4 : SH-SY5Y (human neuroblastoma epithelial cell) whole cell lysate
Lane 5 : NCCIT (human pluripotent embryonic carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

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

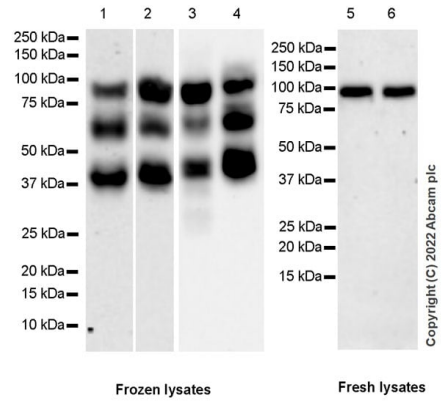
Predicted band size: 83 kDa
Observed band size: 95 kDa

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.



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

All lanes : Anti-SUZ12 antibody [EPR26230-82] (ab307891) at 1/1000 dilution

Lane 1 : HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate
Lane 3 : C6 (rat glial tumor glial cell) whole cell lysate
Lane 4 : F9 (mouse embryonal carcinoma epithelial cell) whole cell lysate
Lane 5 : C6 whole cell lysate
Lane 6 : Neuro-2a whole cell lysate

Lysates/proteins at 20 µg per lane.

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

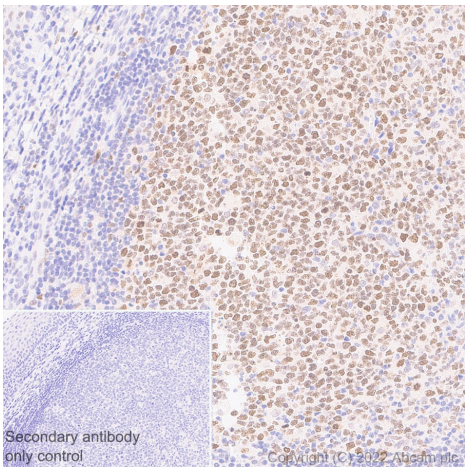
Predicted band size: 83 kDa
Observed band size: 95 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times:

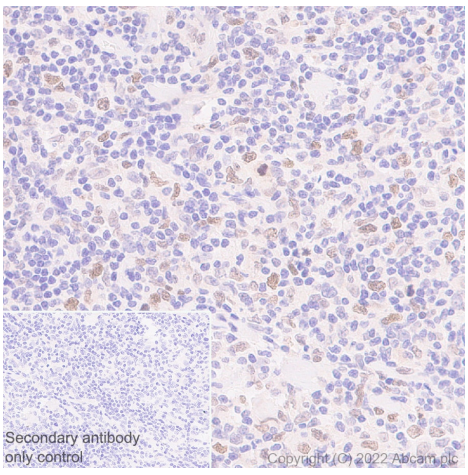
Lane 1 and 2: 3 minutes
Lane 3 and 4: 114 seconds
Lane 5-6: 3 minutes

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.



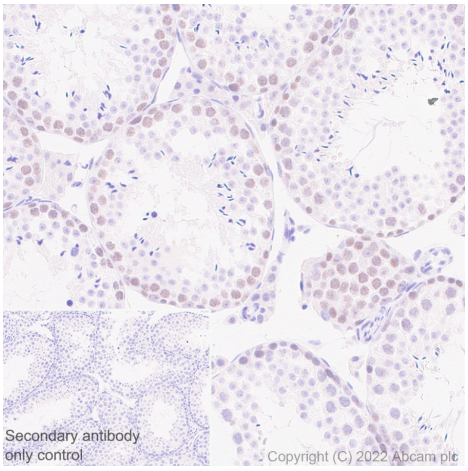
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

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.



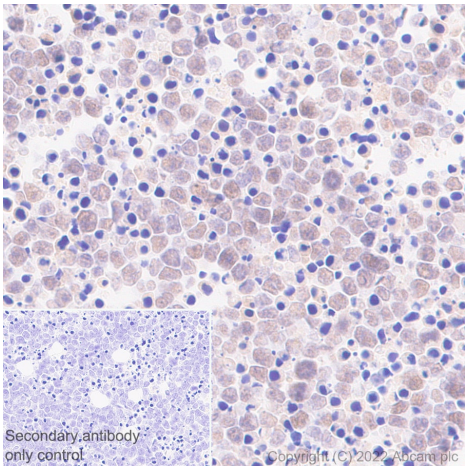
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

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.



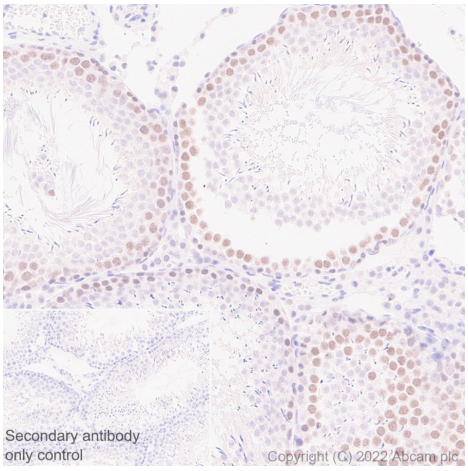
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

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.



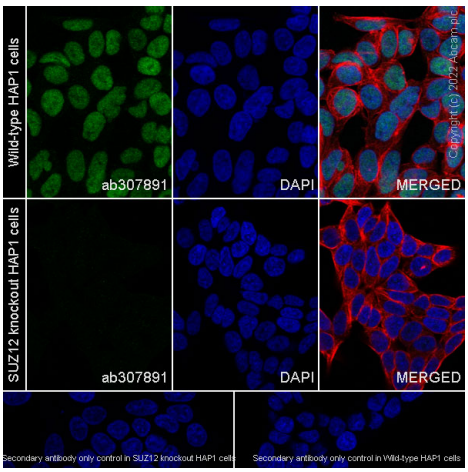
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUZ12 antibody [EPR26230-82] (ab307891)

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)

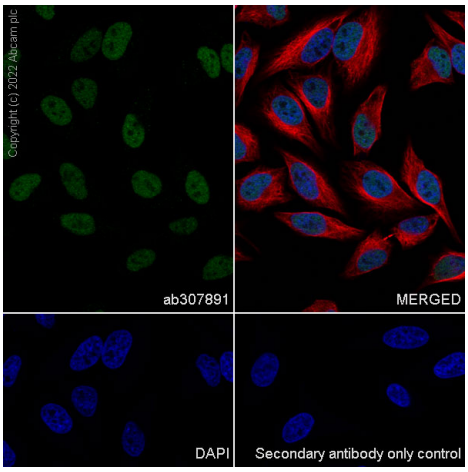
Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling SUZ12 with ab307891 at 1/1000 dilution (0.493 ug/ml) followed by ready to use LeicaDS9800 (Bond® Polymer Refine Detection).
Nuclear staining in rat testis.
The section was incubated with ab307891 for 30 mins at room temperature. 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.



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).

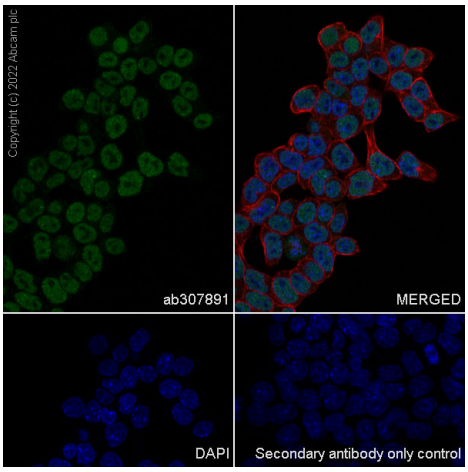
Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/mL).



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).

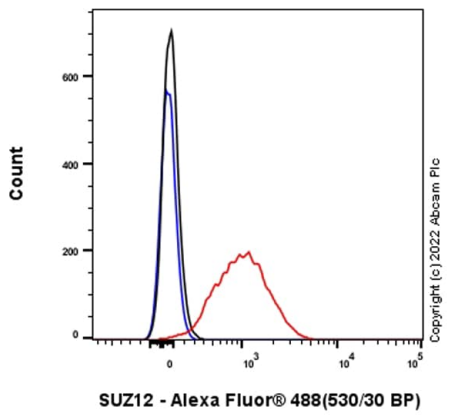
Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/mL).



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

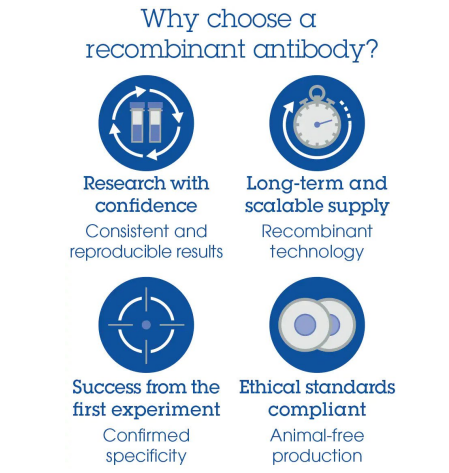
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized F9 (mouse embryonal carcinoma epithelial cell) cells labeling SUZ12 with ab307891 at 1/50 dilution (9.86 ug/ml) followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 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.



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

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