abcam

Product datasheet

Anti-WHSC1/NSD2 antibody [EPR23777-107] ab259940

Recombinant RabMAb

1 References 8 Images

Overview

Product name	Anti-WHSC1/NSD2 antibody [EPR23777-107]
Description	Rabbit monoclonal [EPR23777-107] to WHSC1/NSD2
Host species	Rabbit
Tested applications	**Suitable for:** WB, Flow Cyt (Intra), ICC/IF **Unsuitable for:** ChIP,IHC-P or IP
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa transfected with scrambled siRNA, Hela transfected with WHSC1/NSD2 siRNA 1, Hela transfected with WHSC1/NSD2 siRNA 2, HeLa, 293T, NIH/3T3, PC-3, Neuro-2a lysates. ICC/IF: PC-3, Neuro-2a cells. Flow Cyt: PC-3, Neuro-2a 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: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23777-107

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab259940 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		1/1000. Predicted molecular weight: 152 kDa.
Flow Cyt (Intra)		1/500.
ICC/IF		1/250.

Application notes Is unsuitable for ChIP,IHC-P or IP.

Target

Function Probable histone methyltransferase (By similarity). May act as a transcription regulator that binds DNA and suppresses IL5 transcription.

Tissue specificity Widely expressed.

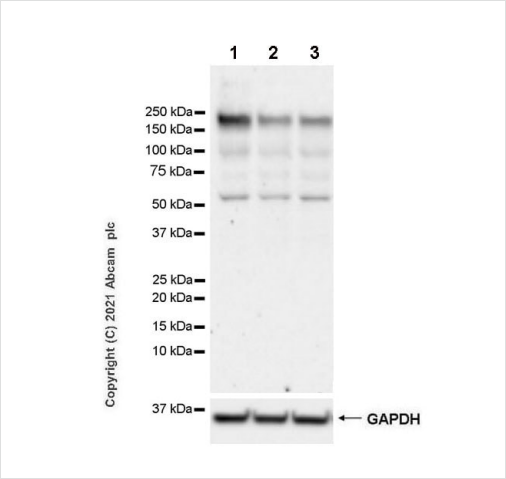
Involvement in disease Note=A chromosomal aberration involving WHSC1 is a cause of multiple myeloma tumors. Translocation t(4;14)(p16.3;q32.3) with IgH.
Note=WHSC1 is located in the Wolf-Hirschhorn syndrome (WHS) critical region. WHS results from by sub-telomeric deletions in the short arm of chromosome 4. WHSC1 is deleted in every case, however deletion of linked genes contributes to both the severity of the core characteristics and the presence of the additional syndromic problems.

Sequence similarities Belongs to the histone-lysine methyltransferase family. SET2 subfamily.
Contains 1 AWS domain.
Contains 1 HMG box DNA-binding domain.
Contains 4 PHD-type zinc fingers.
Contains 1 post-SET domain.
Contains 2 PWWP domains.
Contains 1 SET domain.

Post-translational modifications Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization Cytoplasm and Nucleus. Chromosome.

Images



Western blot - Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940)

All lanes : Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) transfected with scrambled siRNA control whole cell lysate
Lane 2 : Hela transfected with WHSC1/NSD2 siRNA 1 whole cell lysate
Lane 3 : Hela transfected with WHSC1/NSD2 siRNA 2 whole cell lysate

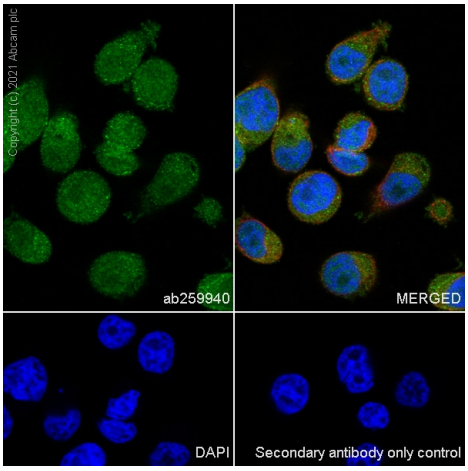
Lysates/proteins at 20 µg per lane.

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

Predicted band size: 152 kDa
Observed band size: 152 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

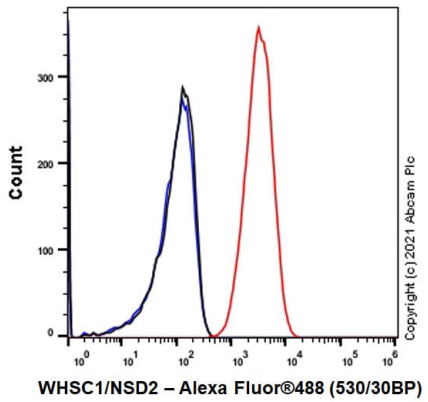
Exposure time: 3 minutes



Immunocytochemistry/ Immunofluorescence - Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940)

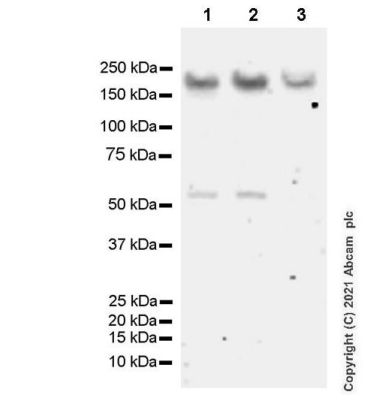
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized PC-3 cells labelling WHSC1/NSD2 with ab259940 at 1/250 (2.068 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing nuclear and cytoplasmic staining in PC-3 cell line is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 2ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized PC-3 (human prostate adenocarcinoma epithelial cell) cells labelling WHSC1/NSD2 with ab259940 at 1/500 dilution (0.1ug)(Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat F(ab')2 Anti-Rabbit IgG (DyLight® 488, **ab98507**) at 1/500 dilution was used as the secondary antibody.



Western blot - Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940)

All lanes : Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate
Lane 2 : 293T (human embryonic kidney epithelial cell), whole cell lysate
Lane 3 : NIH/3T3 (mouse embryonic fibroblast), whole cell lysate

Lysates/proteins at 20 µg per lane.

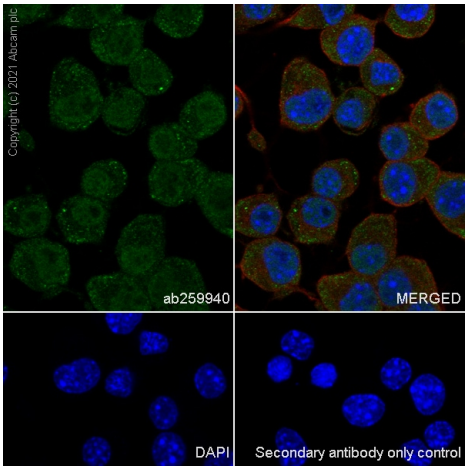
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

Predicted band size: 152 kDa
Observed band size: 152 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Fresh lysates were used in this WB.

Exposure time: 3 minutes



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Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a cells labelling WHSC1/NSD2 with ab259940 at 1/250 (2.068 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing nuclear and cytoplasmic staining in Neuro-2a cell line. is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue).

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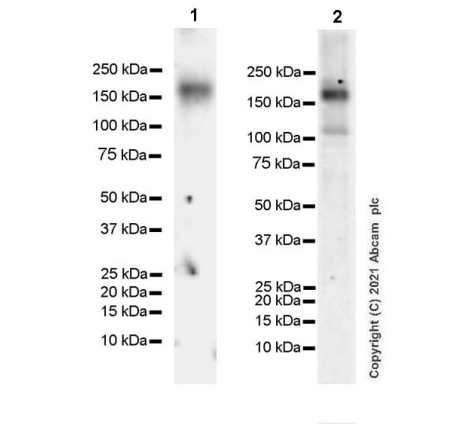


Western blot - Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940)

All lanes : Anti-WHSC1/NSD2 antibody [EPR23777-107] (ab259940) at 1/1000 dilution

Lane 1 : PC-3 (human prostate adenocarcinoma epithelial cell), whole cell lysate
Lane 2 : Neuro-2a (mouse neuroblastoma neuroblast), whole cell lysate

Lysates/proteins at 10 µg per lane.

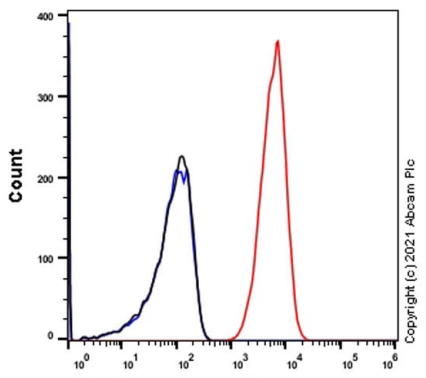
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

Predicted band size: 152 kDa
Observed band size: 152 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Lane 1 of this blot was developed using a higher sensitivity ECL substrate.

Exposure time: 3 minutes



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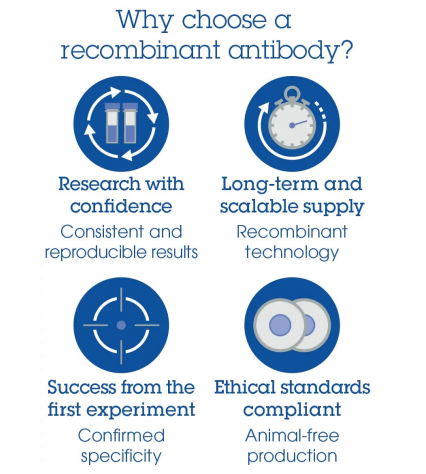

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