abcam

Product datasheet

Anti-WHSC1/NSD2 antibody [29D1] - BSA and Azide free ab235726

2 Images

Overview

Product name	Anti-WHSC1/NSD2 antibody [29D1] - BSA and Azide free
Description	Mouse monoclonal [29D1] to WHSC1/NSD2 - BSA and Azide free
Host species	Mouse
Tested applications	**Suitable for:** WB, IP, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human normal testis tissue. WB: HeLa and SHSY5Y whole cell lysates. IP: HepG2 cell lysate.
General notes	ab235726 is the carrier-free version of **ab75359**. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein G purified
Clonality	Monoclonal
Clone number	29D1
Isotype	IgG2b
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab235726 in the following tested applications.

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

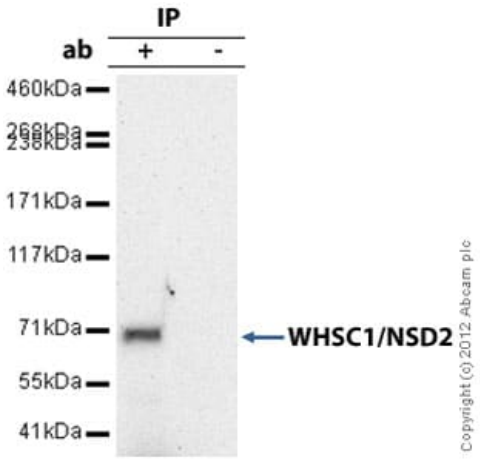
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 80 kDa (predicted molecular weight: 152 kDa).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.

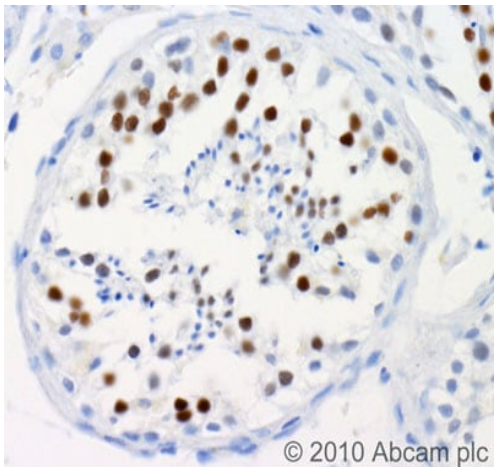
Images



Immunoprecipitation - Anti-WHSC1/NSD2 antibody [29D1] - PBS Only (ab235726)

WHSC1/NSD2 was immunoprecipitated using 0.5mg HepG2 whole cell extract, 10µg of Mouse monoclonal to WHSC1/NSD2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, HepG2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with **ab75359**.
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.
Band: 71kDa: WHSC1/NSD2.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, Azide and Arginine (**ab75359**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-WHSC1/NSD2 antibody [29D1] - PBS Only (ab235726)

ab75359 (1µg/ml) staining WHSC in human testis using an automated system (DAKO Autostainer Plus). Using this protocol there is strong nuclear staining.
Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH6.1/ in a DAKO PT link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.

This data was developed using the same antibody clone in a

different buffer formulation containing PBS, Azide and Arginine (**ab75359**).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors