For Research Use Only

SMCHD1 Polyclonal antibody

Catalog Number: 25589-1-AP

1 Publications



Basic Information

Catalog Number: 25589-1-AP BC035774 Size: 350 μg/ml 23347 **UNIPROT ID:** Source:

Rabbit A6NHR9 Isotype: Full Name:

Immunogen Catalog Number:

AG22293

GenBank Accession Number:

GeneID (NCBI):

structural maintenance of chromosomes flexible hinge domain

containing 1 Calculated MW: 2005 aa, 226 kDa

Observed MW: 220 kDa

Applications

Tested Applications: WB, IP, IF/ICC, IHC, ELISA

Cited Applications:

WB, IP

Species Specificity: human, mouse **Cited Species:**

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Purification Method:

Antigen affinity purification Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF/ICC 1:50-1:500

Positive Controls:

WB: HeLa cells, HEK-293 cells

IP: HeLa cells.

IHC: mouse skeletal muscle tissue,

IF/ICC: HEK-293 cells,

Background Information

Structural maintenance of chromosomes flexible hinge domain containing 1 (SMCHD1) is considered a noncanonical member of the SMC family owing to differences in its type of ATPase domain and in its overall linear domain architecture (PMID: 32779700). SMCHD1 is best known for its role in promoting DNA methylation and gene silencing, with apparent roles in X chromosome inactivation, imprinted gene regulation, and autosome gene cluster repression (PMID: 31668908). Variations in the SMCHD1 gene are associated with two debilitating human disorders, facioscapulohumeral muscular dystrophy (FSHD) and Bosma arhinia microphthalmia syndrome (BAMS)

Notable Publications

Author	Pubmed ID	Journal	Application
Shenli Yuan	36068616	Genome Biol	WB,IP

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



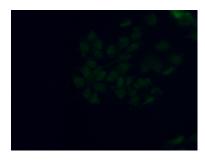
HeLa cells were subjected to SDS PAGE followed by western blot with 25589-1-AP (SMCHD1 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



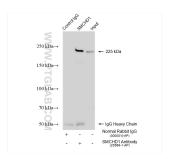
Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 25589-1-AP (SMCHD1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 25589-1-AP (SMCHD1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using 25589-1-AP (5MCHD1 antibody) at dilution of 1:200 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-SMCHD1 (IP:25589-1-AP, 4ug; Detection:25589-1-AP 1:1000) with HeLa cells lysate 1085 ug.