For Research Use Only

SMARCB1 Polyclonal antibody

Catalog Number:20654-1-AP Featured Product 4 Publications

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Basic Information

Catalog Number:
20654-1-AP

Size:
550 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_003073

GeneID (NCBI):
6598

UNIPROT ID:
Q12824

Full Name:
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1

Calculated MW:
44 kDa

Observed MW:
40-45 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200

Applications

Tested Applications:
IHC, IP, WB, ELISA

Cited Applications:
WB, IF

Species Specificity:
human

Cited Species:
human

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

Positive Controls:

WB : HepG2 cells, K-562 cells

IP : K-562 cells,

IHC : human lymphoma tissue, human prostate cancer tissue

Background Information

SMARCB1, also named as BAF47, INI1 and SNF5L1, belongs to the SNF5 family. It is a core component of the BAF (hSWI/SNF) complex. The BAF complex is able to create a stable, altered form of chromatin that constrains fewer negative supercoils than normal. SMARCB1 stimulates in vitro the remodeling activity of SMARCA4/BRG1/BAF190A. It is involved in activation of CSF1 promoter. SMARCB1 belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. SMARCB1 plays a key role in cell-cycle control and causes cell cycle arrest in G0/G1. It is also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. Defects in SMARCB1 are a cause of rhabdoid tumor (RDT) which also known as malignant rhabdoid tumor (MRT). Defects in SMARCB1 are a cause of schwannomatosis. The antibody is specific to SMARCB1.

Notable Publications

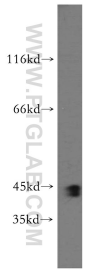
Author	Pubmed ID	Journal	Application
Ying Chen	35506290	Bioengineered	WB
Li Wang	31915373	Nat Cell Biol	IF
Ying Chen	34999540	Transl Oncol	WB

Storage

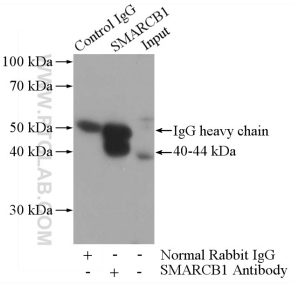
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

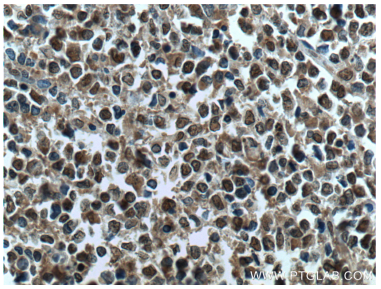
Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 20654-1-AP (SMARCB1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



IP result of anti-SMARCB1 (IP:20654-1-AP, 4ug; Detection:20654-1-AP 1:500) with K-562 cells lysate 3200ug.



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 20654-1-AP (SMARCB1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).