

For Research Use Only

SAMHD1 Polyclonal antibody

Catalog Number: 12586-1-AP

Featured Product

80 Publications



Basic Information

Catalog Number:

12586-1-AP

Concentration:

500 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3287

GenBank Accession Number:

BC036450

GeneID (NCBI):

25939

UNIPROT ID:

Q9Y3Z3

Full Name:

SAM domain and HD domain 1

Calculated MW:

626 aa, 72 kDa

Observed MW:

64-72 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:750-1:3000

FC (Intra): 0.20 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, ChIP

Species Specificity:

human, mouse

Cited Species:

human, mouse, monkey

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, mouse heart tissue, human heart tissue, L02 cells, human brain tissue

IP : K-562 cells,

IHC : human lung cancer tissue, human colon cancer tissue

IF/ICC : HepG2 cells,

FC (Intra) : K-562 cells,

Background Information

SAMHD1, highly expressed by monocytes and monocyte-derived dendritic cells and by monocyte-derived macrophages at a lower extent, is reported as an HIV-1 restriction factor that inhibits the early step of the HIV-1 life cycle. Vpx (virus-like particles containing viral protein X) could overcome this block by interacting with SAMHD1, inducing proteasome-dependent degradation of SAMHD1. Mutations in SAMHD1 cause Aicardi-Goutières syndrome, a genetic encephalopathy with presumed immune pathogenesis. Three alternatively spliced transcripts encoding different isoforms have been described.

Notable Publications

Author	Pubmed ID	Journal	Application
Jason Neidleman	32990219	Elife	
Simone De Meo	32986788	PLoS Pathog	
Ramona Businger	31548682	Nat Microbiol	IF

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

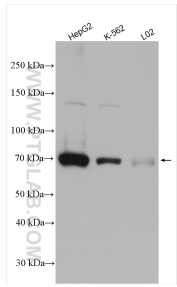
T: 4006900926

E: Proteintech-CN@ptglab.com

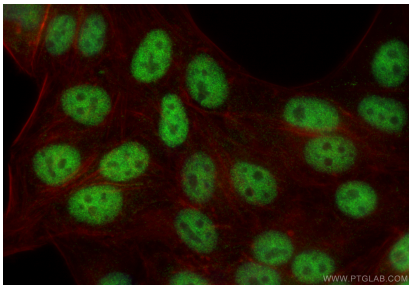
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

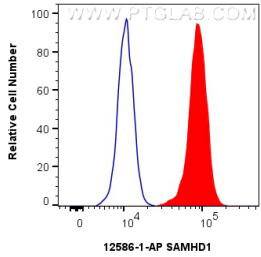
Selected Validation Data



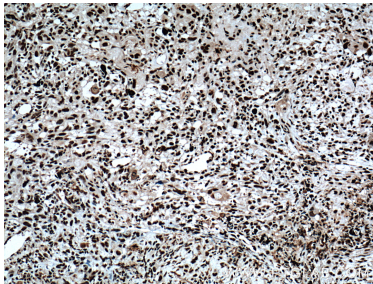
Various lysates were subjected to SDS PAGE followed by western blot with 12586-1-AP (SAMHD1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



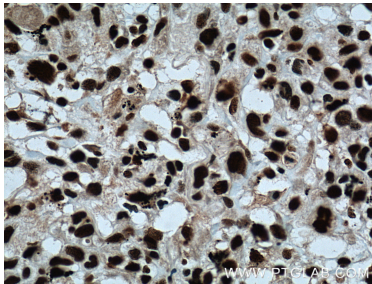
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SAMHD1 antibody (12586-1-AP) at dilution of 1:1500 and Coralite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



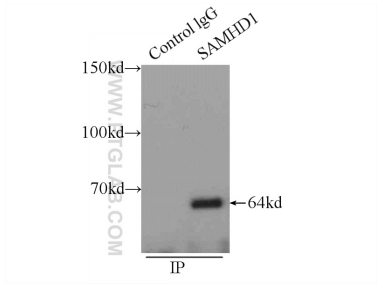
1x10⁶ K-562 cells were intracellularly stained with 0.2 ug SAMHD1 Polyclonal antibody (12586-1-AP) and Coralite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.2 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12586-1-AP (SAMHD1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12586-1-AP (SAMHD1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-SAMHD1 (IP:12586-1-AP, 3ug; Detection:12586-1-AP 1:300) with K-562 cells lysate 2400ug.