

For Research Use Only

SAMHD1 Polyclonal antibody

Catalog Number: 12586-1-AP

Featured Product

65 Publications



Basic Information

Catalog Number: 12586-1-AP	GenBank Accession Number: BC036450	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 µg/ml by Nanodrop;	GeneID (NCBI): 25939	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 1:50-1:500
Source: Rabbit	Full Name: SAM domain and HD domain 1	
Isotype: IgG	Calculated MW: 626 aa, 72 kDa	
Immunogen Catalog Number: AG3287	Observed MW: 64-72 kDa	

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
FC, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

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 : HepG2 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

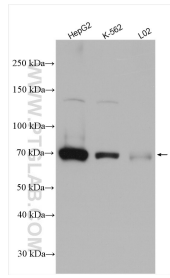
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

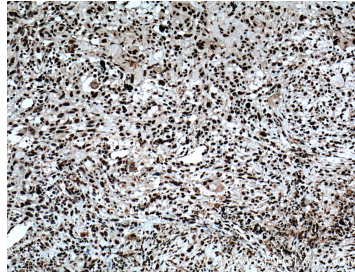
E: proteintech@ptglab.com
W: ptglab.com

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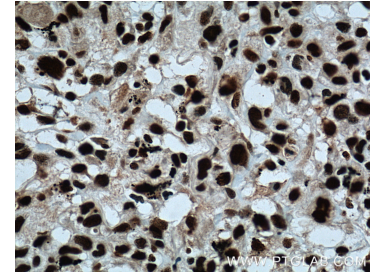
Selected Validation Data



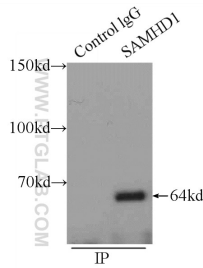
Various lysates were subjected to SDS PAGE followed by western blot with 12586-1-AP (SAMHD1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



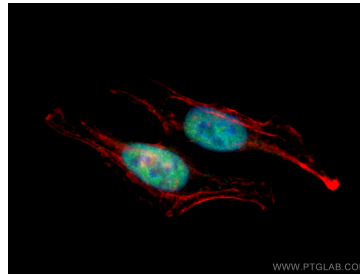
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12586-1-AP (SAMHD1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



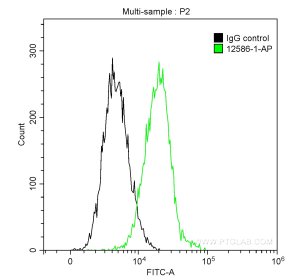
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12586-1-AP (SAMHD1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SAMHD1 antibody (12586-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1×10^6 THP-1 cells were intracellularly stained with 0.2 ug Anti-Human SAMHD1 (12586-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), or 0.2 ug Control Antibody (black). Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100.