

For Research Use Only

SAT1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 83319-1-PBS



Basic Information

Catalog Number: 83319-1-PBS	GenBank Accession Number: BC008424	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 6303	CloneNo.: 240157G2
Source: Rabbit	UNIPROT ID: P21673	
Isotype: IgG	Full Name: spermidine/spermine N1-acetyltransferase 1	
Immunogen Catalog Number: AG1154	Calculated MW: 20 kDa	
	Observed MW: 15-25 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse

Product Information

83319-1-PBS targets SAT1 as part of a matched antibody pair:

MP00344-2: 83319-3-PBS capture and 83319-1-PBS detection (validated in Cytometric bead array)

MP00344-3: 83319-2-PBS capture and 83319-1-PBS detection (validated in Cytometric bead array)

MP00344-4: 83319-1-PBS capture and 83319-3-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Spermidine/spermine N1-acetyltransferase 1 (SAT1 or SSAT1) is the key regulatory enzyme in the catabolism of polyamines, catalyzing acetylation of spermidine or spermine to generate N1-acetyl spermidine or N1-acetyl spermine, and N1, N12-diacetylspermine. The cellular level of SAT1 is normally extremely low, but it is induced rapidly by a variety of stimuli, including polyamines, polyamine analogs, toxic chemicals, certain drugs, and growth factors. Downregulation of SAT1 has been reported in Epstein-Barr virus positive Burkitt's lymphoma cells.

Storage

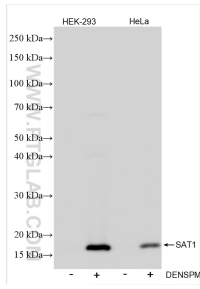
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

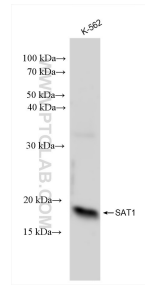
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

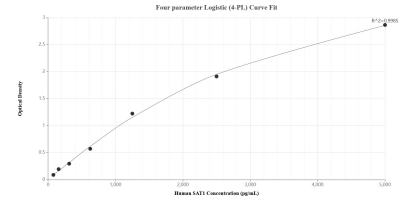
Selected Validation Data



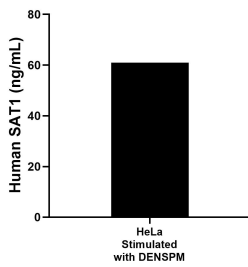
Untreated and DENS PM treated HEK-293 and HeLa cells were subjected to SDS PAGE followed by western blot with 83319-1-RR (SAT1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83319-1-PBS in a different storage buffer formulation.



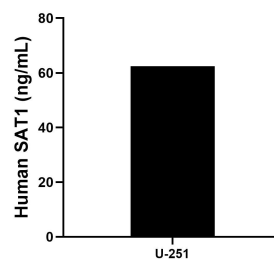
Various lysates were subjected to SDS PAGE followed by western blot with 83319-1-RR (SAT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83319-1-PBS in a different storage buffer formulation.



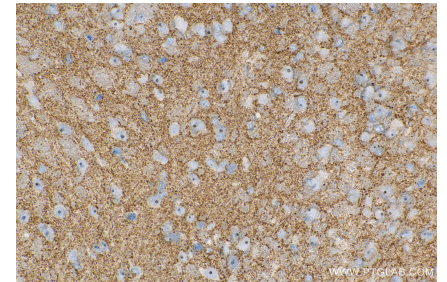
Sandwich ELISA standard curve of MP00344-4, Human SAT1 Recombinant Matched Antibody Pair - PBS only. 83319-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1154. 83319-3-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



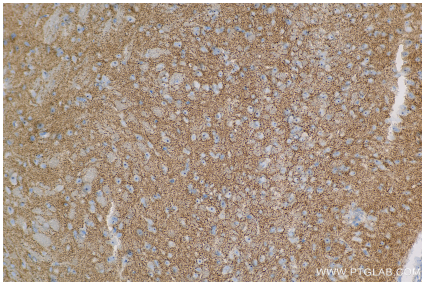
The mean SAT1 concentration was determined to be 60.9 ng/mL in DENS PM-stimulated HeLa cell extracts based on a 3.0 mg/mL extract load.



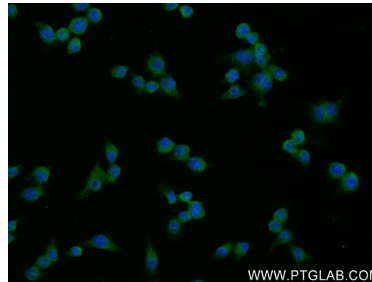
The mean SAT1 concentration was determined to be 62.4 ng/mL in U-251 cell extract based on a 1.4 mg/mL extract load.



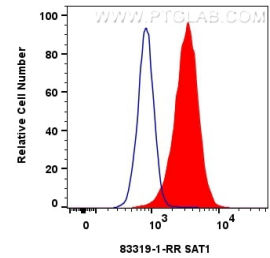
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83319-1-RR (SAT1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83319-1-PBS in a different storage buffer formulation.



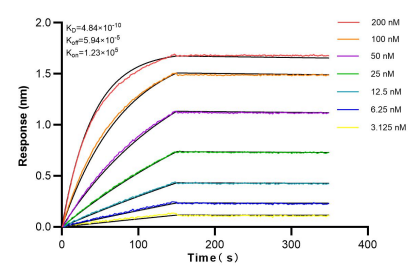
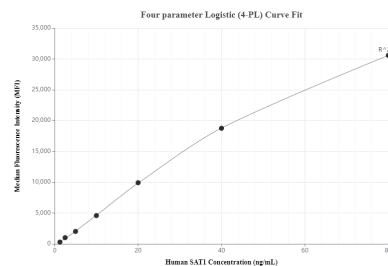
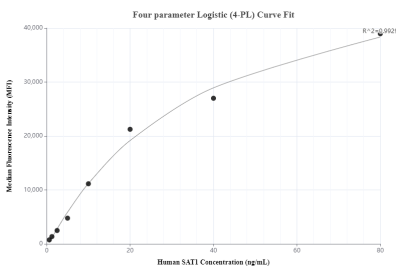
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83319-1-RR (SAT1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83319-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed RAW 264.7 cells using SAT1 antibody (83319-1-RR, Clone: 240157G2) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83319-1-PBS in a different storage buffer formulation.



1×10^6 RAW 264.7 cells were intracellularly stained with 0.25 ug SAT1 Recombinant antibody (83319-1-RR, Clone:240157G2) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83319-1-PBS in a



Cytometric bead array standard curve of MP00344-2, SAT1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83319-3-PBS. Detection antibody: 83319-1-PBS. Standard: Ag1154. Range: 0.625-80 ng/mL.

Cytometric bead array standard curve of MP00344-3, SAT1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83319-2-PBS. Detection antibody: 83319-1-PBS. Standard:null. Range: null.

Biolayer interferometry (BLI) kinetic assays of 83319-1-RR against Human SAT1 were performed. The affinity constant is 0.484 nM.