

## Product Datasheet

### SAMHD1 Antibody (orb1239948)

<b>Catalog Number</b>	orb1239948
<b>Category</b>	Antibodies
<b>Description</b>	SAMHD1 Antibody
<b>Target</b>	SAMHD1
<b>Clonality</b>	Polyclonal
<b>Species/Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse
<b>Form/Appearance</b>	Liquid
<b>Concentration</b>	1 mg/mL
<b>Buffer/Preservatives</b>	SAMHD1 antibody is supplied in PBS containing 0.02% sodium azide.
<b>Purification</b>	SAMHD1 antibody is affinity chromatography purified via peptide column.
<b>Immunogen</b>	Anti-SAMHD1 antibody (orb1239948) was raised against a peptide corresponding to 18 amino acids near the carboxy terminus of human SAMHD1.
<b>UniProt ID</b>	<b>Q9Y3Z3</b>
<b>MW</b>	Predicted: 72kD Observed: 72 kD
<b>Tested applications</b>	ELISA, IF, IHC, WB

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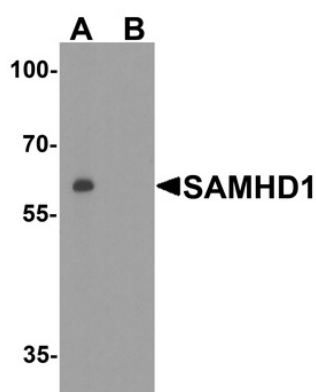
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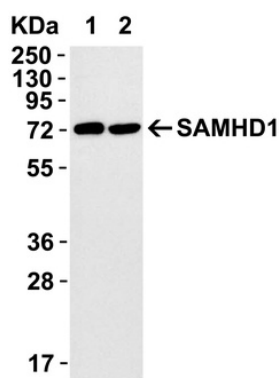
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<b>Specificity</b>	SAMHD1 antibody is human and mouse reactive.
<b>Antibody Type</b>	Primary Antibody
<b>Modifications</b>	None
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>NCBI</b>	<a href="#">NP_056289</a>
<b>Expiration Date</b>	12 months from date of receipt.



Western Blot Validation in Human Daudi Cell Lines. Loading: 15 µg of lysates per lane. Antibodies: SAMHD1 orb1239948, 1 µg/mL, in (A: the absence and B: the presence of blocking peptide), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Overexpression Validation in 293T Transfected Cells. Loading: 15 µg of lysates per lane. Antibodies: SAMHD1 orb1239948 (0.1 µg/mL), (1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. 293 cells were transfected with (1) wild-type SAMHD1 or (2) SAMHD1 (mutation T592A).

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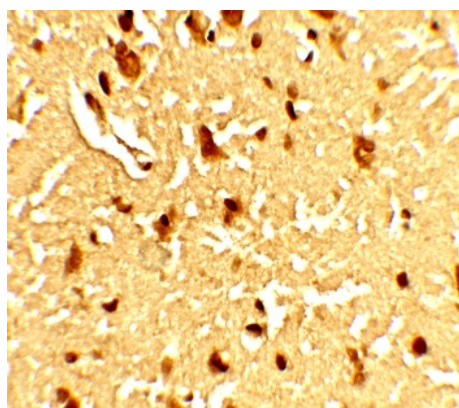
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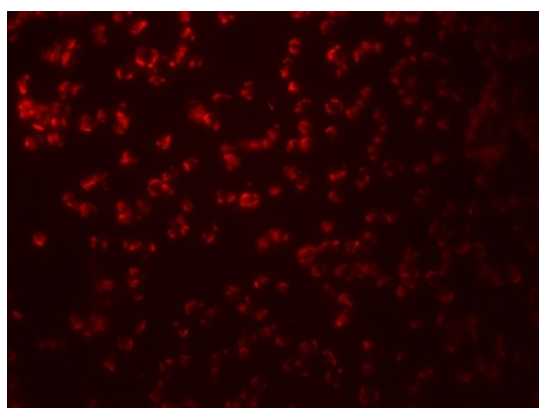
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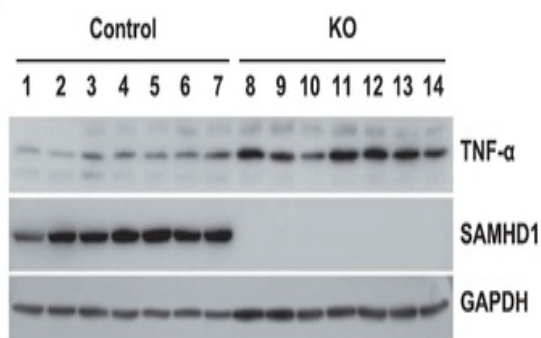
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Immunohistochemistry Validation of SAMHD1 in Human Brain Tissue. Immunohistochemical analysis of paraffin-embedded Human Brain Tissue using anti-SAMHD1 antibody (orb1239948) at 5 µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 °C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunofluorescence Validation of SAMHD1 in Human Daudi cells. Immunofluorescent analysis of 4% paraformaldehyde-fixed Human Daudi Cells labeling SAMHD1 with orb1239948 at 20 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



KO Validation of SAMHD1 in xenograft mice (Kodigepalli et al., 2018). THP-1 control and SAMHD1 KO (THP-1/KO) cells were injected into NSG (non-obese diabetic/severe combined immune deficient-gamma) mice. Protein expression levels of SAMHD1 were examined by Western blot with anti-SAMHD1 antibodies (orb1239948) and SAMHD1 was not detected in THP-1/KO cells.

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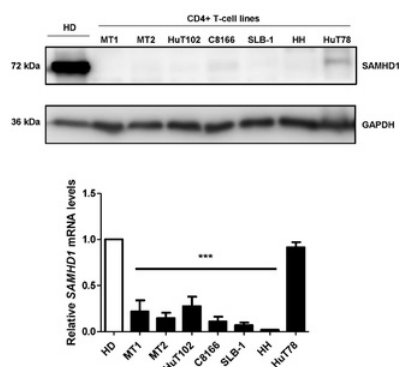
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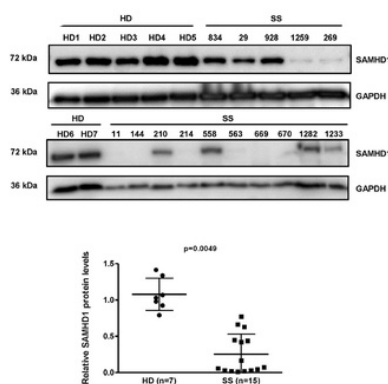
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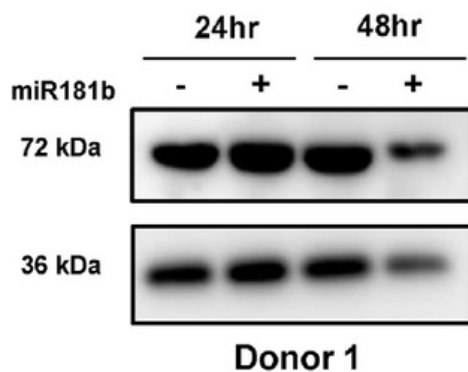
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Overexpression Validation of SAMHD1 in CD4+ T-cells from a healthy donor and transformed CD4+ T-cell lines (Kohnken et al., 2017). MT1, MT2, SLB-1, and C8166 were from leukemia patients and HH, HuT78, and HuT102 were from cutaneous T-cell lymphoma (CTCL) patients. SAMHD1 protein expression detected by anti-SAMHD1 antibodies (orb1239948) was significantly increased in normal CD4+ T-cells as compared to leukemia- and CTCL- derived CD4+ T-cell lines. This blot is representative from four independent experiments with four healthy donors.



Overexpression of SAMHD1 in CD4+ T-cells from Healthy Donors and Sézary Syndrome (SS) patients (Kohnken et al., 2017). SAMHD1 protein expression detected by anti-SAMHD1 antibodies (orb1239948) was significantly reduced in CD+ T-cells from 15 SS patients as compared to those from 7 healthy donors.



Regulated Expression Validation of SAMHD1 in CD4+ T-cells from a healthy donor (Kohnken et al., 2017). SAMHD1 protein expression detected by anti-SAMHD1 antibodies (orb1239948) was significantly decreased by about 40% relative to control cells at 48hr post-nucleofection with miR-181b.

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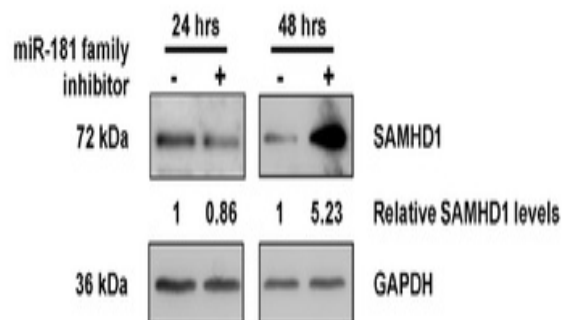
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Regulated Expression Validation of SAMHD1 in MT2 CD4+ T-cells from leukemia patients (Kohnken et al., 2017). SAMHD1 protein expression detected by anti-SAMHD1 antibodies (orb1239948) was significantly increased by 5-fold at 48hr post-nucleofection with miR-181family inhibitor treatment.

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