

Product Name: KD-Validated SAMHD1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00956

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 72.2kDa

Antigen Information

Gene Name	SAMHD1
Alternative Names	SAM And HD Domain Containing Deoxynucleoside Triphosphate Triphosphohydrolase 1; MOP-5; Monocyte Protein 5; SBBI88; HDDC1; Deoxynucleoside Triphosphate Triphosphohydrolase SAMHD1; SAM Domain And HD Domain-Containing Protein 1; Dendritic Cell-Derived IFNG-Induced Protein; SAM Domain And HD Domain 1; HSAMHD1; DNTPase; Mg11; AGS5; DCIP; Aicardi-Goutieres Syndrome 5; HD Domain Containing 1; EC 3.1.5.-; CHBL2; MOP5
Gene ID	25939.0
SwissProt ID	Q9Y3Z3
Immunogen	A synthesized peptide derived from human SAMHD1

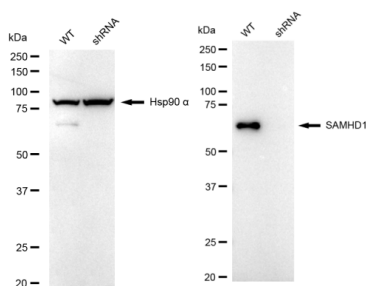
Background

This gene may play a role in regulation of the innate immune response. The encoded protein is upregulated in response to viral infection and may be involved in mediation of tumor necrosis factor- α proinflammatory responses. Mutations in this gene have been associated with Aicardi-Goutieres syndrome. [provided by RefSeq, Mar 2010]

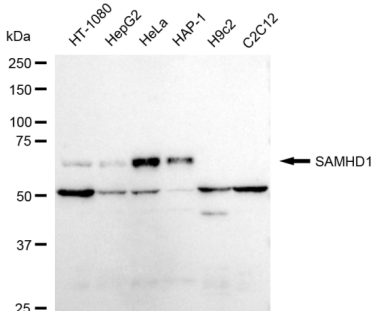
Research Area

Microbiology

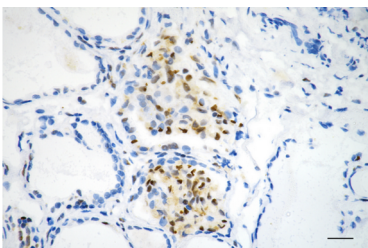
Image Data



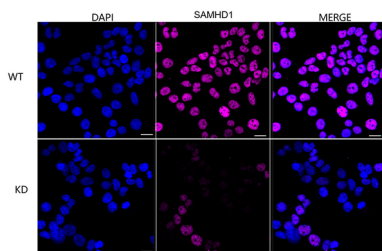
Western blotting analysis using SAMHD1 antibody (KVA00956). SAMHD1 expression in wild-type (WT) and SAMHD1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with SAMHD1 antibody (KVA00956, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



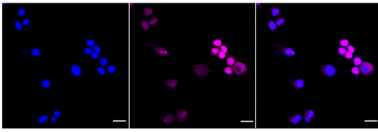
Western blotting analysis using SAMHD1 antibody (KVA00956). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with SAMHD1 antibody (KVA00956, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



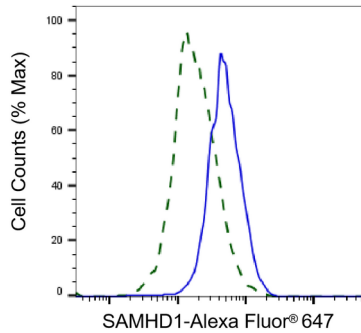
Immunohistochemistry was performed on paraffin-embedded human papillary thyroid carcinoma using SAMHD1 antibody (KVA00956, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 $\times$ objective). Scale bar: 25 μ m.



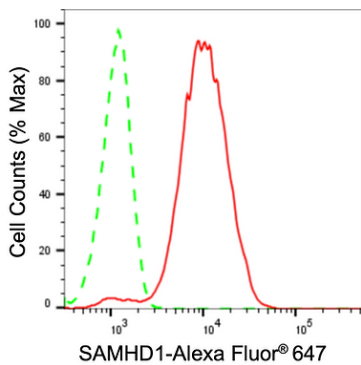
Immunocytochemical staining of HeLa cells using SAMHD1 antibody (KVA00956, 1:1,000). Top panel: wild-type (WT); Bottom panel: SAMHD1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; GRK2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.



Immunocytochemical staining of HeLa cells with SAMHD1 antibody (KVA00956, 1:1,000). Nuclei were stained blue with DAPI; SAMHD1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



Validation of SAMHD1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with SAMHD1 antibody (KVA00956, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of SAMHD1 expression in HeLa cells using SAMHD1 antibody (KVA00956, 1:2,000). Green, isotype control; red, SAMHD1.