Data Sheet (Cat.No.TMAC-03684)

Anti-SAMHD1 Antibody (8T611)

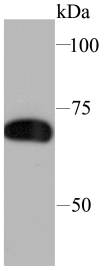
Product Details

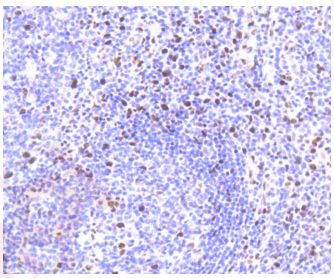
Ig Type:	IgG
Reactivity:	Human
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 72 kDa.
Clone:	8T611
Purification:	ProA affinity purified

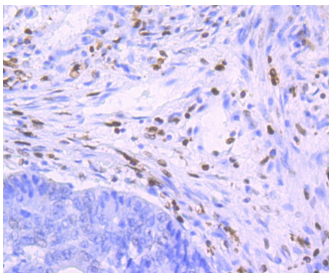
Applications

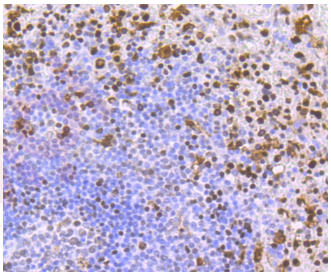
Verified Activity:

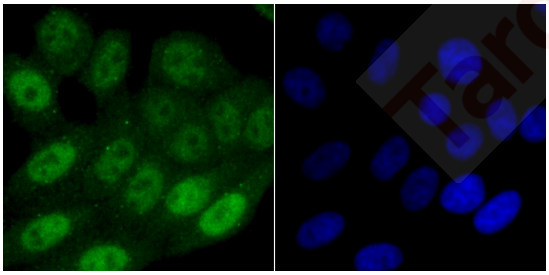
1. Western blot analysis of SAMHD1 on THP-1 cell lysate using anti-SAMHD1 antibody at 1/1,000 dilution.
2. Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-SAMHD1 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-SAMHD1 antibody. Counter stained with hematoxylin.
4. Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-SAMHD1 antibody. Counter stained with hematoxylin.
5. ICC staining SAMHD1 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
6. ICC staining SAMHD1 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
7. ICC staining SAMHD1 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
8. Flow cytometric analysis of K562 cells with SAMHD1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

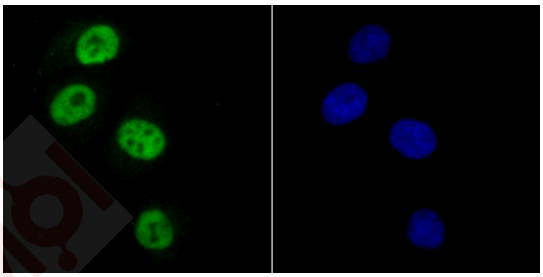


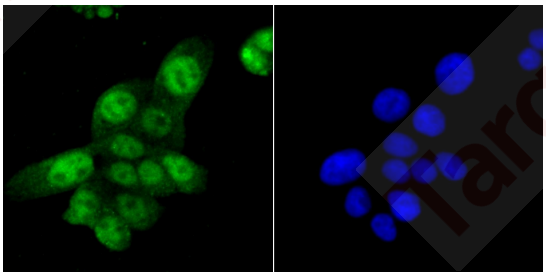


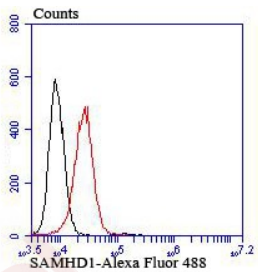












Application: FCM,ICC,IHC,WB

Recommended: WB: 1:500-2000; IHC: 1:50-200; ICC: 1:100-500; FCM: 1:50-100

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein
Uniprot ID:	Q9Y3Z3
Synonyms:	HD domain containing 1;MOP-5;Mg11;MOP5;HDDC1;SAM domain and HD domain-containing protein 1;Samhd 1;DCIP;Dendritic cell-derived IFNG-induced protein;SAM domain and HD domain 1;SAMH1_HUMAN;Monocyte protein 5;OTTHUMP00000030889;SAM domain and HD domain containing protein 1;Dendritic cell derived IFNG induced protein;SBBI88; Deoxynucleoside triphosphate triphosphohydrolase SAMHD1;dNTPase;CHBL2;MOP 5

Research Background

SAM domain and HD domain-containing protein 1 is a protein that in humans is encoded by the SAMHD1 gene. SAMHD1 is a cellular enzyme, responsible for blocking replication of HIV in dendritic cells, macrophages and monocytes. It is an enzyme that exhibits phosphohydrolase activity, converting deoxynucleoside triphosphates (dNTPs) to inorganic phosphate (iPPP) and a 2'-deoxynucleoside (i.e. deoxynucleosides without a phosphate group). In doing so, SAMHD1 depletes the pool of dNTPs available to a reverse transcriptase for viral cDNA synthesis and thus prevents viral replication. SAMHD1 has also shown nuclease activity. Although a ribonuclease activity was described to be required for HIV-1 restriction, recent data confirmed that SAMHD1-mediated HIV-1 restriction in cells does not involve ribonuclease activity.