

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SAMHD1 in ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 883335
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SAMHD1 His206-Arg339 Accession # Q9Y3Z3
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Human SAM (Sterile Alpha Motif) domain and HD (His/Asp motif-containing phosphohydrolase) domain-containing 1 (SAMHD1), also known as DCIP (dendritic cell IFN-γ-induced protein) or MOP5 (monocyte protein 5) is a 70-80 kDa, 626 amino acid (aa) nuclear protein that acts as a dGTP-regulated deoxynucleotide triphosphohydrolase. It restricts HIV replication by binding nucleic acids. SAMHD-1 expression is induced by TNF-α in myeloid lineage cells and lung fibroblasts. Human SAMHD1 mutations are linked to Aicardi-Goutieres Syndrome, which is characterized by symptoms mimicking viral infection. Human SAMHD1 isoforms of 602, 591, and 556 aa lack aa 113-136, 502-536, and 285-354, respectively. The 591 and 556 aa forms are catalytically inactive. Within the region used as an immunogen, human SAMHD1 shares 85% aa sequence identity with mouse and rat SAMHD1.

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