

DESCRIPTION

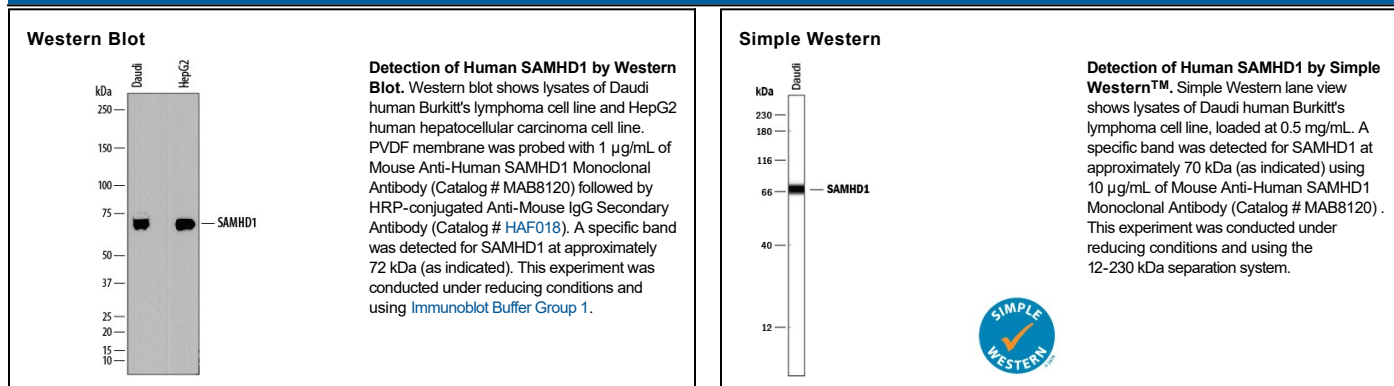
Species Reactivity	Human
Specificity	Detects human SAMHD1 in ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 883335
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SAMHD1 His206-Arg339 Accession # Q9Y3Z3
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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-g-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.