

CD47 active protein

CD47 Protein, Human, Recombinant (ECD, hFc Tag)

CATALOG #
AAA258008

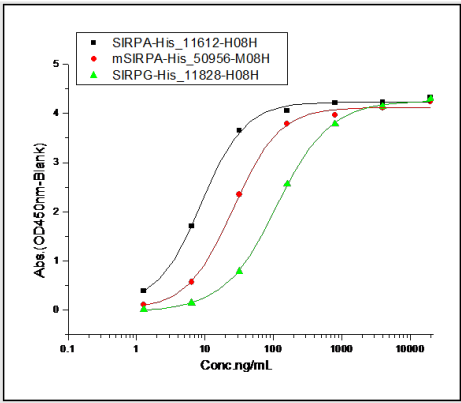
HOST
HEK293 Cells

PRODUCT SYNONYMS

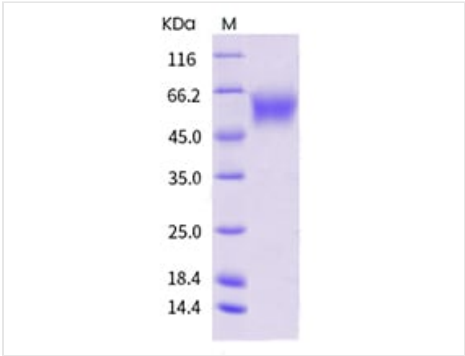
CD47; CD47 Protein; Human; Recombinant (ECD; hFc Tag); Human CD47 Protein (ECD; Fc Tag); IAP Protein; MER6 Protein; OA3 Protein; CD47 molecule; CD47 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Pro13 9
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gln 19
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the human CD47 (NP_942088.1)(Met1-Pro139) was expressed with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its binding ability in a functional ELISA. Immobilized human SIRPA-His at 10ug/ml (100uL/well) can bind human CD47-Fc. The EC50 of human CD47-Fc is 10.1-23.5ng/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized mouse SIRPA-His at 10ug/ml (100uL/well) can bind human CD47-Fc. The EC50 of human CD47-Fc is 0.05-0.13ug/ml. 3. Measured by its binding ability in a functional ELISA. Immobilized human SIRPG-His at 10ug/ml (100uL/well) can bind human CD47-Fc. The EC50 of human CD47-Fc is 0.58-1.34ug/ml.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE



Application Data

1. Measured by its binding ability in a functional ELISA. Immobilized human SIRPA-His at 10 ug/ml (100 ul/well) can bind human CD47-Fc, The EC50 of human CD47-Fc is 10.1-23.5 ng/ml. 2. Measured by its binding ability in a functional ELISA. Immobilized mouse SIRPA-His at 10 ug/ml (100 ul/well) can bind human CD47-Fc, The EC50 of human CD47-Fc is 0.05-0.13 ug/ml. 3. Measured by its binding ability in a functional ELISA. Immobilized human SIRPG-His at 10 ug/ml (100 ul/well) can bind human CD47-Fc, The EC50 of human CD47-Fc is 0.58-1.34 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for CD47 active protein	Background: CD47 contains 1 Ig-like V-type (immunoglobulin-like) domain and is a receptor for the C-terminal cell binding domain of thrombospondin. It may play a role in membrane transport and signal transduction. CD47 is also a membrane protein, which is involved in the increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix. It is very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain. CD47 may play a role in membrane transport and/or integrin dependent signal transduction. It may prevent premature elimination of red blood cells. It also may be involved in membrane permeability changes induced following virus infection. By acting as an adhesion receptor for THBS1 on platelets, CD47 plays a role in both cell adhesion and in the modulation of integrins. It also plays an important role in memory formation and synaptic plasticity in the hippocampus.
Product Categories/Family for CD47 active protein	Cancer Drug Targets
References	Brown EJ, et al. (2001) Integrin-associated protein (CD47) and its ligands. Trends Cell Biol. 11(3): 130-5.Oldenborg PA. (2004) Role of CD47 in erythroid cells and in autoimmunity. Leuk Lymphoma. 45(7): 1319-27.Kaczorowski DJ, et al. (2007) Targeting CD47: NO limit on therapeutic potential. Circ Res. 100(5): 602-3.

NCBI AND UNIPROT INFORMATION

NCBI GI #	38683836
NCBI GeneID	961
NCBI Accession #	NP_942088.1
NCBI GenBank Nucleotide #	NM_198793.2
Molecular Weight	33,845 Da
NCBI Official Full Name	leukocyte surface antigen CD47 isoform 2
NCBI Official Synonym Full Names	CD47 molecule
NCBI Official Symbol	CD47
NCBI Official Synonym Symbols	IAP; OA3; MER6

NCBI Protein Information

leukocyte surface antigen CD47; CD47 glycoprotein; Rh-related antigen; integrin associated protein; integrin-associated protein; integrin-associated signal transducer; antigenic surface determinant protein OA3; antigen identified by monoclonal antibody 1D

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/cd47/258008>