

Cluster Of Differentiation 19 (CD19) Active Protein | CD19 active protein

Active Cluster Of Differentiation 19 (CD19)

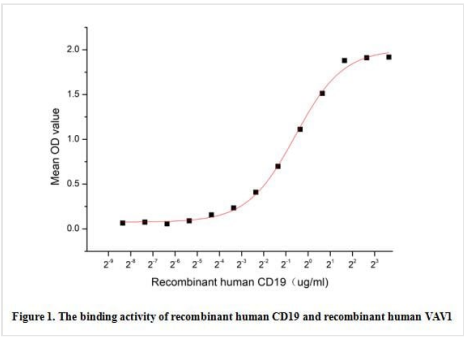
CATALOG # AAA161866	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Cluster Of Differentiation 19 (CD19); Active Cluster Of Differentiation 19 (CD19); Cluster Of Differentiation 19; CD19 active protein (eukaryotic; 293F cell); Human; B4; B-lymphocyte surface antigen B4; T-cell surface antigen Leu-124; CD19 active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Pro20~Val1 13
Applicable Applications for CD19 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Eukaryotic expression
Tag	N-terminal His Tag and C-terminal Fc Region of Human IgG1
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.8
Research Area	Signal transduction, CD & Adhesion molecule, Tumor immunity, Infection immunity, Immune molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

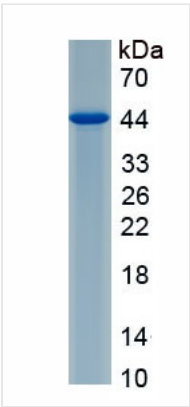


Bioactivity

Cluster Of Differentiation 19 (CD19) is a type I transmembrane glycoprotein belonging to the immunoglobulin superfamily. It is expressed in normal and neoplastic B cells, and it modulates the threshold of B cell activation for amplifying B cell receptor signaling. This protein has recently emerged as a very attractive biomarker and therapeutic target for B-cell malignancies. The development of safe and effective ligands for CD19 has become an important need for the development of targeted conventional and immunotherapies. As far as we know, signaling through CD19 activates Vav/mitogen-activated protein kinase pathway and induces formation of a CD19/Vav/phosphatidylinositol 3-kinase complex in human B cell precursors. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CD19 and recombinant human VAV1. Briefly, biotin-linked CD19 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to VAV1-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human CD19 and recombinant human VAV1 was shown in Figure 1, the EC50 for this effect is 0.67 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for CD19 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	296010921
NCBI GeneID	930
NCBI Accession #	NP_001171569.1
NCBI GenBank Nucleotide #	NM_001178098.1
UniProt Accession #	P15391; Q96S68; Q9BRD6; A0N0P9
Molecular Weight	61,128 Da
NCBI Official Full Name	B-lymphocyte antigen CD19 isoform 1
NCBI Official Synonym Full Names	CD19 molecule
NCBI Official Symbol	CD19
NCBI Official Synonym Symbols	B4; CVID3
NCBI Protein Information	B-lymphocyte antigen CD19; differentiation antigen CD19; T-cell surface antigen Leu-12; B-lymphocyte surface antigen B4
UniProt Protein Name	B-lymphocyte antigen CD19
UniProt Gene Name	CD19

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://www.aaabiotech.com/293f-active-protein/cluster-of-differentiation-19-cd19/161866>