

Cluster Of Differentiation 200 (CD200) Active Protein | CD200 active protein

Active Cluster Of Differentiation 200 (CD200)

CATALOG # AAA161800	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Cluster Of Differentiation 200 (CD200); Active Cluster Of Differentiation 200 (CD200); Cluster Of Differentiation 200; MOX1; MOX2; MRC; OX-2; My033; Antigen Identified By Monoclonal Antibody MRC OX-24; CD200 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
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	Ala47~Ser2 71
Applicable Applications for CD200 active protein	Activity Assay, Cell Culture
Species	Rat
Expression System	Prokaryotic expression
Tag	N-terminal His and GST Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.6
Research Area	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

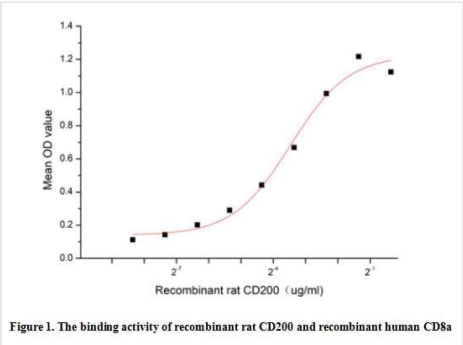
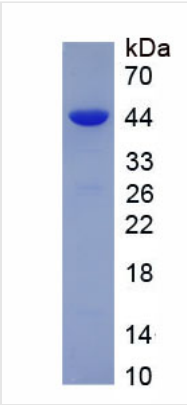


Figure 1. The binding activity of recombinant rat CD200 and recombinant human CD8a

Bioactivity

Cluster Of Differentiation 200 (CD200), also known as OX-2 or MOX1/MOX2, is a membrane glycoprotein belonging to the immunoglobulin superfamily. This protein is widely expressed in various cell types, including neurons, endothelial cells, certain immune cells (such as B cells, dendritic cells, T cell subsets), and various tumor cells. CD200 is a multifaceted protein with important roles in immune regulation, neuronal function, and disease pathogenesis. Besides, Cluster Of Differentiation 8a (CD8a) has been identified as an interactor of CD200, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat CD200 and recombinant human CD8a. Briefly, CD200 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CD8a-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CD200 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, 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 450/630 nm immediately. The binding activity of recombinant rat CD200 and recombinant human CD8a was shown in Figure 1, the EC50 for this effect is 0.09 ug/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for CD200 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	129300
NCBI GeneID	24560
UniProt Accession #	P04218
Molecular Weight	31,088 Da
NCBI Official Full Name	OX-2 membrane glycoprotein
NCBI Official Synonym Full Names	Cd200 molecule
NCBI Official Symbol	Cd200
NCBI Official Synonym Symbols	Mox2; Cspmo2; MRCOX2
NCBI Protein Information	OX-2 membrane glycoprotein; Cd200 antigen; MRC OX-2 antigen; cell surface protein (thymocyte antigen identified by monoclonal antibody MRC-OX2)
UniProt Protein Name	OX-2 membrane glycoprotein
UniProt Gene Name	Cd200
UniProt Synonym Gene Names	Mox2
UniProt Entry Name	OX2G_RAT

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/e-coli-active-protein/cluster-of-differentiation-200-cd200/161800>