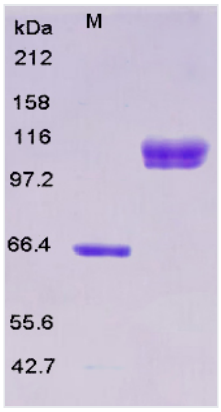
ALCAM / CD166 Mouse Recombinant Protein

PRODUCT OVERVIEW

Product Name	ALCAM / CD166, Recombinant Protein
Full Product Name	Recombinant Mouse ALCAM / CD166 Protein (His & Fc tag)
Product Gene Name	ALCAM / CD166 recombinant protein
Product Synonym Names	AI853494, BEN, CD166, DM-GRASP, MGC27910, MuSC, SC1, ALCAM.
Host	Human Cells
Form/Format	Lyophilized from sterile PBS, pH 7.4
Purity/Purification	> 95 % as determined by SDS-PAGE
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -70 degree C
Molecular Weight	65,092 Da
3D Structure	ModBase 3D Structure for Q61490
Predicted N Terminal	Trp 28
Endotoxin	< 1.0 EU per mug of the protein as determined by the LAL method
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Application Notes for ALCAM / CD166 recombinant protein	The recombinant mouse ALCAM/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer consists of 748 amino acids and has a predicted molecular mass of 84.2 kDa. Due to glycosylation, in SDS-PAGE under reducing conditions, rmALCAM/Fc migrates with approximately molecular mass of 105-110 kDa & 210 kDa corresponding to the monomer and homodimer.
Related Product Information for ALCAM / CD166 recombinant protein	Background: Activated leukocyte cell adhesion molecule (ALCAM)/Cluster of differentiation (CD166) is a type I transmembrane cell adhesion molecule belonging to the Ig superfamily and a ligand for CD6 that is expressed on T lymphocytes. The extracellular domain of ALCAM contains five Ig-like domains (three Ig-like C2-type domains and two Ig-like V-type domains), of which the amino-terminal V1 domain is essential for ligand binding and ALCAM-mediated cell aggregation. ALCAM mediates both heterophilic (ALCAM-CD6) and homophilic (ALCAM-ALCAM) cell-cell interactions. ALCAM/CD6 interaction plays a role in T cell development and T cell regulation, as well as in the binding of T- and B-cells to activated leukocytes. Recently, homophilic (ALCAM-ALCAM) adhesion was shown to play important roles in tight cell-to-cell interaction and regulation of stem cell differentiation. While expressed in a wide variety of tissues, ALCAM is usually restricted to subsets of cells involved in dynamic growth and/or migration, including neural development, branching organ development, hematopoiesis, immune response and tumor progression. And CD166 is regarded as a potential novel breast cancer indicator and therapeutic target. Description: A DNA sequence encoding the extracellular domain (Met 1-Lys 527) of mouse ALCAM (NP_033785.1) precursor was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.
Other Notes	Small volumes of ALCAM / CD166 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ALCAM / CD166 purchase	MBS2547221 is a recombinant protein targeting ALCAM / CD166. Also known as Recombinant Mouse ALCAM / CD166 Protein (His & Fc tag). Host: Human Cells.



SDS-PAGE of ALCAM / CD166 recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ALCAM / CD166. It may not necessarily be applicable to this product.

NCBI GI #	31791059
NCBI GeneID	11658
NCBI Accession #	NP_033785.1
UniProt Primary Accession #	Q61490
UniProt Secondary Accession #	O70136; Q8CDA5; Q8R2T0
UniProt Related Accession #	Q61490
GenBank Nucleotide #	NM_009655.3
NCBI Official Full Name	CD166 antigen isoform 1
NCBI Official Synonym Full Names	activated leukocyte cell adhesion molecule
NCBI Official Symbol	Alcam
NCBI Official Synonym Symbols	BEN; SC1; MuSC; CD166; AI853494; DM-GRASP
UniProt Protein Name	CD166 antigen
UniProt Synonym Protein Names	Activated leukocyte cell adhesion molecule
UniProt Gene Name	Alcam
NCBI Protein Information	CD166 antigen
UniProt Comments for ALCAM / CD166	ALCAM: Cell adhesion molecule that binds to CD6. Involved in neurite extension by neurons via heterophilic and homophilic interactions. May play a role in the binding of T- and B-cells to activated leukocytes, as well as in interactions between cells of the nervous system. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Cell adhesion; Membrane protein, integral Chromosomal Location of Human Ortholog: 16|16 B5 Cellular Component: axon; cell soma; external side of plasma membrane; focal adhesion; immunological synapse; intrinsic to plasma membrane; T cell receptor complex Molecular Function: protein binding Biological Process: axon guidance; heterophilic cell adhesion; motor axon guidance
Research Articles on ALCAM / CD166	**1.** Our results indicate that the loss of CD166 impacts hematopoietic stem cell numbers

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/recombinant-protein/alcam-cd166/2547221