

MADCAM1 recombinant protein

Recombinant Mouse MADCAM1 Protein (ECD, His Tag), HPLC-verified

CATALOG #
AAA259268

HOST
HEK293 Cells

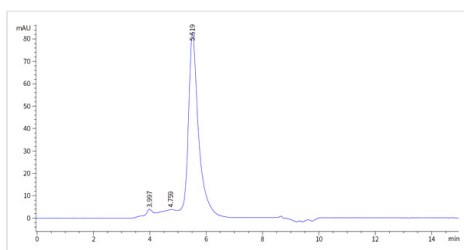
PRODUCT SYNONYMS

MADCAM1; Recombinant Mouse MADCAM1 Protein (ECD; His Tag); HPLC-verified; mucosal vascular addressin cell adhesion molecule 1; AV211525 Protein; Mouse; MADCAM1 recombinant protein

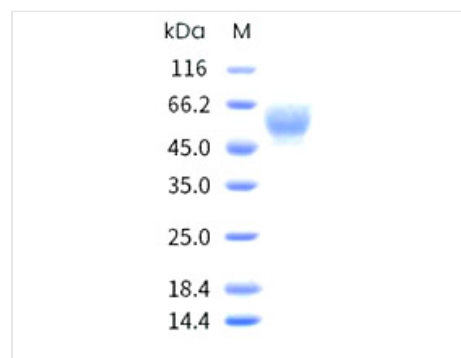
PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>= 95% as determined by SDS-PAGE. = 90% as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile PBS, pH 7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Species	Mouse
Predicted N Terminal	Gln 22
Endotoxin	<1.0 EU per ug protein as determined by the LAL method.
Protein Construction	A DNA sequence encoding the Mouse MADCAM1 (NP_038619)(Met1-Ser364) was expressed with a polyhistidine tag at the C-terminus.
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.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for MADCAM1 recombinant protein	Mucosal addressin cell adhesion molecule-1 (MAdCAM-1), an immunoglobulin, is a membrane-bound receptor expressed on high endothelial venules, promoting the migration of immune cells from the bloodstream to gut-associated mucosal tissues via interaction with alpha4beta7 integrin. Beginning from its N terminus, two IgSF domains, a mucin-like region, a transmembrane domain, and a 43-residue cytoplasmic domain define the structure of MAdCAM-1. While expression of MAdCAM-1 is upregulated under acute and chronic inflammatory conditions like in inflammatory bowel disease, its deficiency resulted in decreased production of ConA-induced proinflammatory mediators. In a promising cancer study, an anti-MAdCAM-1 antibody reduced the number of migrating CD8+, CD68+ and CD163+ immune cells and suppressed IL-6/p-STAT3 and TNF-alpha/NF-kappaB pathway expression in mice, thus reducing colon carcinogenesis and tumor aggressiveness.
References	1. Ozawa N, et al. MAdCAM-1 targeting strategy can prevent colitic cancer carcinogenesis and progression via suppression of immune cell infiltration and inflammatory signals. Int J Cancer. 2023. doi: 10.1002/ijc.34722. 2. Tan K, et al. The structure of immunoglobulin superfamily domains 1 and 2 of MAdCAM-1 reveals novel features important for integrin recognition. Structure. 1998. doi: 10.1016/s0969-2126(98)00080-x. 3. Drescher HK, et al. beta7-Integrin and MAdCAM-1 play opposing roles during the development of non-alcoholic steatohepatitis. J Hepatol. 2017. doi: 10.1016/j.jhep.2017.02.001.

NCBI AND UNIPROT INFORMATION

Molecular Weight	The recombinant Mouse MADCAM1 consists of 354 amino acids and predicts a molecular mass of 38.25 kDa. It migrates as an approximately 55.3 kDa band in SDS-PAGE under reducing conditions.
------------------	--

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.