Data Sheet (Cat.No.TMPK-00965)

TargetMol

MAdCAM-1 Protein, Human, Recombinant (aa 19-317, hFc)

General Information

Synonyms: MADCAM1;MACAM1;MAdCAM-1

Protein Construction: Gln19-Gln317

Species: Human

Expression Host: HEK293 Cells

Accession: Q13477-1

Molecular Weight: 58.17 kDa (predicted). Due to glycosylation, the protein migrates to 75-95 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity: Immobilized Human MADCAM1, hFc Tag at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Biotinylated Anti-MADCAM1 Antibody, hFc Tag with the EC50 of 8.4ng/ml determined by ELISA.

Purity: > 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Mucosal addressin cell adhesion molecule-1 (MAdCAM-1) contributes to the recruitment of donor T cells into the mucosal tissues of the recipient after allogeneic hematopoietic stem cell transplantation (aHSCT). The aim of our study was to determine whether selected single nucleotide polymorphisms (SNPs) of the MADCAM1 gene are associated with development of serious complications after aHSCT.

Reference

Ambruzova Z, et al. Possible impact of MADCAM1 gene single nucleotide polymorphisms to the outcome of allogeneic hematopoietic stem cell transplantation. Hum Immunol. 2009 Jun;70(6):457-60. doi: 10.1016/j.humimm.2009.03.008. Epub 2009 Mar 12. PMID: 19286444.