

ARG70237

Human HVEM / TR2 recombinant protein (ECD) (Fc-His-tagged, C-ter)

Package: 100 µg

Store at: -20°C

Summary

Product Description	HEK293 expressed, Fc-His-tagged (C-ter) Human HVEM / TR2 recombinant protein (ECD).
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	HVEM / TR2 (ECD)
Species	Human
A.A. Sequence	Leu39 - Val202 of Human HVEM / TR2 (NP_003811.2) with an Fc-6X His tag at the C-terminus.
Expression System	HEK293
Alternate Names	Herpes virus entry mediator A; HVEM; Tumor necrosis factor receptor-like 2; HVEA; CD antigen CD270; CD270; Tumor necrosis factor receptor superfamily member 14; LIGHTR; HveA; Herpesvirus entry mediator A; ATAR; TR2

Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant human HVEM at 5 µg/ml (100 µl/well) can bind Biotinylated Recombinant human BTLA with a linear range of 1.5-6 ug/ml.
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Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 97% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TNFRSF14
Gene Full Name	tumor necrosis factor receptor superfamily, member 14
Background	This gene encodes a member of the TNF (tumor necrosis factor) receptor superfamily. The encoded protein functions in signal transduction pathways that activate inflammatory and inhibitory T-cell immune response. It binds herpes simplex virus (HSV) viral envelope glycoprotein D (gD), mediating its entry into cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]
Function	Receptor for four distinct ligands: The TNF superfamily members TNFSF14/LIGHT and homotrimeric LTA/lymphotoxin-alpha and the immunoglobulin superfamily members BTLA and CD160, altogether

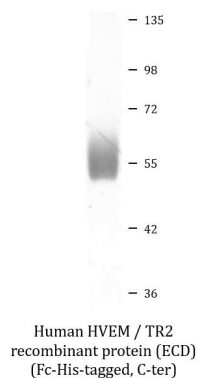
defining a complex stimulatory and inhibitory signaling network (PubMed:9462508, PubMed:10754304, PubMed:18193050, PubMed:23761635). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:19915044, PubMed:9153189, PubMed:9162022). Participates in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. In response to ligation of TNFSF14/LIGHT, delivers costimulatory signals to T cells, promoting cell proliferation and effector functions (PubMed:10754304). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed:23761635). In the context of bacterial infection, acts as a signaling receptor on epithelial cells for CD160 from intraepithelial lymphocytes, triggering the production of antimicrobial proteins and proinflammatory cytokines (By similarity). Upon binding to CD160 on activated CD4+ T cells, downregulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (PubMed:18193050). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (PubMed:19915044) (By similarity). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (PubMed:19915044) (By similarity).

(Microbial infection) Acts as a receptor for Herpes simplex virus 1/HHV-1.

(Microbial infection) Acts as a receptor for Herpes simplex virus 2/HHV-2. [UniProt]

Calculated Mw	30 kDa
PTM	N-glycosylated. [UniProt]
Cellular Localization	Membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG70237 Human HVEM / TR2 recombinant protein (ECD) (Fc-His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70237 Human HVEM / TR2 recombinant protein (ECD) (Fc-His-tagged, C-ter).