Datasheet for ABIN7317805

ULBP1 Protein (His tag)

Go to Product page

Overview

Quantity:	100 µg
Target:	ULBP1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This ULBP1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human ULBP1/N2DL1 Protein (His Tag)(Active)
Sequence:	Met 1-Gly 216
Characteristics:	A DNA sequence encoding the mature form of human ULBP1 (NP_079494.1) (Met 1-Gly 216) was expressed, with a polyhistidine tag at the C-terminus.
Purity:	> 98 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Immobilized human ULBP1-His at 10 µg/ml (100 µl/well) can bind human NKG2D,The EC50 of human NKG2D is 0.39-0.91 µg/ml.

Target Details

Target:	ULBP1

Target Details

Alternative Name:	ULBP1/N2DL1 (ULBP1 Products)
Background:	Background: UL16-binding proteins (ULBP) or retinoic acid early transcripts-1 (RAET1) are ligands to the activating receptor, NKG2D. Ten members of the human ULBP/RAET1 gene family have been identified to encode for potentially functional proteins, and have tissue-specific expressions. ULBP1, also known as RAET1I and NKG2DL1, together with at least ULBP 2 and 3, are well-known ligands for NKG2D, and activate multiple signaling pathways in primary NK cells, resulting in the production of cytokines and chemokines. ULBP1 is expressed in T-cells, B-cells, erythroleukemia cell lines and in a wide range of tissues including heart, brain, lung, liver and bone marrow, as well as some tumor cells. As an unconventional member of the MHC class I family, ULBP1 function in immune responses, especially in cancer and infectious diseases. Unlike other ULBP members, ULBP1 is able to interact with soluble CMV glycoprotein UL16 in CMV infected cells. The interaction with UL16 blocked the interaction with the NKG2D receptor, and thus might escape the immune surveillance. Furthermore, UL16 also causes ULBP1 to be retained in the ER and cis-Golgi apparatus so that it does not reach the cell surface. The ULBP1 regulation may have implications for development of new therapeutic strategies against cancer cells. Synonym: RAET1I
Molecular Weight:	23.8 kDa
NCBI Accession:	NP_079494
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.