Recombinant Human ULBP1/N2DL1 Protein (His Tag)

Catalog Number:PKSH031492



Note: Centrifuge before opening to ensure complete recovery of vial contents.

	DC.	P	П	n	77	on
\perp		УЦ	ш	и	21	$\mathbf{u}_{\mathbf{I}\mathbf{I}}$

Synonyms RAET1I
Species Human

Expression Host

Sequence

Met 1-Gly 216

Accession

NP_079494.1

Calculated Molecular Weight

Observed molecular weight

Tag

HEK293 Cells

Met 1-Gly 216

218

228-32 kDa

C-His

Bioactivity 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.

Properties

Purity > 98 % as determined by reducing SDS-PAGE.

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

Storage 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.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from sterile PBS, pH 7.4

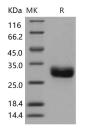
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

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

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>

Recombinant Human ULBP1/N2DL1 Protein (His Tag)

Catalog Number:PKSH031492



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.

For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>