Recombinant human ULBP-2 protein

Catalog Number: ATGP1592

PRODUCT INFORMATION

Expression system
E.coli

Domain
26-216aa

UniProt No.
Q9BZM5

NCBI Accession No.
NP_079493

Alternative Names
UL16 binding protein 2, ALCAN-alpha, NKG2D ligand 2, N2DL-2, NKG2DL2, Retinoic acid early transcript 1H, RAET1H, N2DL2

PRODUCT SPECIFICATION

Molecular Weight
24.3 kDa (216aa)

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 30% glycerol, 2M urea, 0.2M NaCl, 2mM DTT

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
uLBP2, also known as NKG2D ligand 2, belongs to the MHC class I family. This protein is ligand for the NKG2D receptor, together with at least uLBP1 and uLBP3. uLBPs activate multiple signaling pathways in primary NK cells, resulting in the production of cytokines and chemokines. Binding of uLBPs ligands to NKG2D induces calcium mobilization and activation of the JAK2, STAT5, ERK and PI3K kinase/Akt signal transduction pathway. In CMV infected cells, interacts with soluble CMV glycoprotein uL16. The interaction with uL16 blocked the

interaction with the NKG2D receptor, providing a mechanism by which CMV infected cells might escape the immune system. uL16 also causes uLBP2 to be retained in the ER and cis-Golgi apparatus so that it does not reach the cell surface. Recombinant human uLBP2 protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

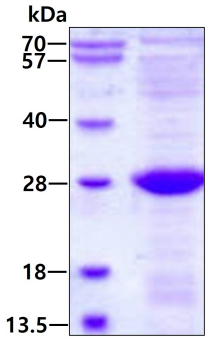
<MGSSHHHHHH SSGLVPRGSH MGSHM>GRADP HSLCYDITVI PKFRPGPRWC AVQGQVDEKT FLHYDCGNKT VTPVSPLGKK LNVTTAWKAQ NPVLREVVDI LTEQLRDIQL ENYTPKEPLT LQARMSCEQK AEGHSSGSWQ FSFDGQIFLL FDSEKRMWTT VHPGARKMKE KWENDKVVAM SFHYFSMGDC IGWLEDFLMG MDSTLEPSAG APLAMS

General References

Cosman D., et al. (2001) Immunity. 14:123-133
Dunn C., et al. (2003) J. Exp. Med. 197:1427-1439

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.