# NKG2D ligand 1 Human E. coli

## Product Data Sheet

**Type:** Recombinant
**Source:** E. coli
**Species:** Human
**Other names:** N2DL-1, NKG2DL1, ALCAN-beta, Retinoic acid early transcript 1I, UL16-binding protein 1, ULBP1, N2DL1, RAET1I

**Cat. No.:**
RD172311100 (0.1 mg)

## Description

Total 201 AA. MW: 23.6 kDa (calculated). UniProtKB acc.no. Q9BZM6 (Gly26-Gly216). N-terminal His-tag (10 extra AA). Protein identity confirmed by LC-MS/MS.

## Introduction to the Molecule

NKG2D ligand 1 acts as a ligand for the NKG2D receptor on the surface of NK cells. Binding of ULBPs ligands to NKG2D induces production of cytokines and chemokines. NKG2D ligand 1 is expressed in T-cells, B-cells, erythroleukemia cell lines and in a wide range of tissues. It belongs to the MHC class I family. The CMV glycoprotein UL16 interacts with NKG2D ligand 1 resulting in retention of NKG2D ligand 1 in the endoplasmic reticulum and Golgi apparatus so it does not reach the cell surface.

## Amino Acid Sequence

```
MKHHHHHHAS GWVDTHCLCY DFIITPKSRP EPQWCEVQGL VDERPFLHYD CVNHKAKAFA SLGKKVNVTK TWEEQTETLR
DVVDFLKGQL LDIQVENLIP IEPLTLQARM SCEHEAHGHG RGSWQFLFNG QKFLLFDSNN RKWTALHPGA KKMTEKWEKN
RDVTMFFQKI SLGDCKMWLE EFLMYWEQML DPTKPPSLAP G
```

## Source

E. coli

## Purity

Purity as determined by densitometric image analysis: > 90%

## Endotoxin

< 1.0 EU/ug

## Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/mL in 20mM Tris buffer, 50 mM NaCl, pH 8.6

## Reconstitution

Add 200µl of deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

## Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

## Storage, Stability/Shelf Life

Store the lyophilized protein at -80°C. Lyophilized protein remains stable until the expiry date when stored at -80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

## Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

## Applications

ELISA, Western blotting

## Note

This product is intended for research use only.


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