

# Recombinant Human ULBP2 protein (His Tag)

Catalog Number: Eg0858

## Basic Information

**Species:**  
 Human

**EC50:**  
 18-72 ng/mL

**Purity:**  
 >95 %, SDS-PAGE

**Tag:**  
 His Tag

## Technical Specifications

**Purity:**  
 >95 %, SDS-PAGE

**Endotoxin Level:**  
 <0.1 EU/ µg protein, LAL method

**Source:**  
 HEK293-derived Human ULBP2 protein Gly26-Ser217 (Accession# Q9BZM5) with a His tag at the C-terminus.

**GeneID:**  
 80328

**Accession:**  
 Q9BZM5

**Predicted Molecular Mass:**  
 22.5 kDa

**SDS-PAGE:**  
 26-32 kDa, reducing (R) conditions

**Formulation:**  
 Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Human ULBP2(His tag) at 2 µg/mL (100 µL/well) can bind Human NKG2D (hFc tag) with a linear range of 18-72 ng/mL.

## Storage and Shipping

### Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

### Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

NKG2D is an activating cell surface receptor that is predominantly expressed on cytotoxic immune cells. NKG2D recognizes a wide range of ligands. In humans, the NKG2D ligand (NKG2DL) includes MICA, MICB, and six members of the ULBP family (ULBP1-6). ULBPs are MHC class I-related molecules. ULBP2 contains two Ig-like domains, the alpha-1 and alpha-2 domains characteristic of the MHC class I family, but lacks the alpha-3 domain. It can be expressed as either a transmembrane or GPI-linked protein, or released from the cell surface. ULBP2 binds and activates the NKG2D, mediating the recruitment and activation of NK cells.

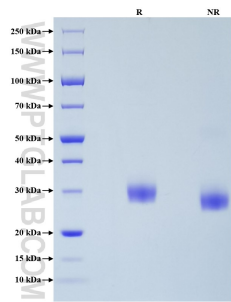
## References

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- 2.Lola Fernández-Messina, et al. (2011). J Cell Sci. 124(Pt 3):321-7.
- 3.Ruipeng Wang, et al. (2014). PLoS One. 9(3):e91133.
- 4.Felix M Wensveen, et al. (20118) Front Immunol. 8:9:441.
- 5.Shixin Duan, et al. (2019) Mol Cancer. 18(1):29.

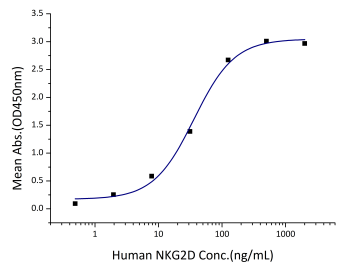
## Synonyms

ULBP2, ALCAN alpha, ALCAN-alpha, N2DL2, N2DL-2

Selected Validation Data



Purity of Recombinant Human ULBP2 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



Immobilized Human ULBP2(His tag) at 2  $\mu$ g/mL (100  $\mu$  L/well) can bind Human NKG2D (hFc tag) with a linear range of 18-72 ng/mL