

Human ULBP-1 Protein

Cat. No. ULB-HM4P1



Description

Source	Recombinant Human ULBP-1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly26-Pro215.
Accession	Q9BZM6
Molecular Weight	The protein has a predicted MW of 25.2 kDa. Due to glycosylation, the protein migrates to 28-35 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in 20 mM PB, 0.5 M NaCl, 0.1 M L-arginine (pH 8.0). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

ULBP-1, or UL16-binding protein 1, is a protein that plays a significant role in the immune system, particularly in the recognition and elimination of abnormal cells, such as those found in cancer. It is a ligand for the NKG2D receptor, which is expressed on the surface of natural killer (NK) cells and certain T cells. The interaction between ULBP-1 and NKG2D can activate these immune cells, leading to the destruction of target cells.

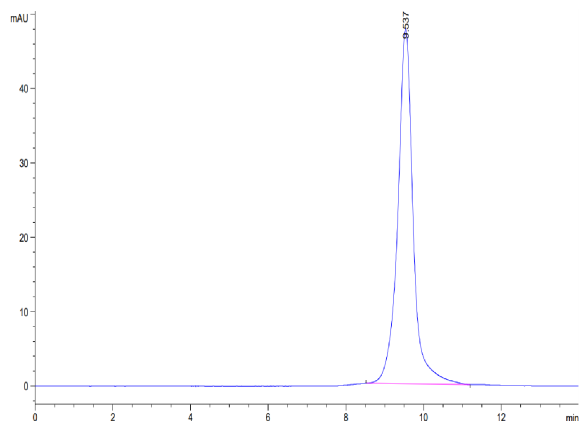
Assay Data

Bis-Tris PAGE



Human ULBP-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



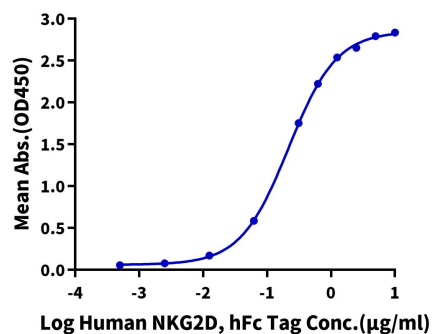
The purity of Human ULBP-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human ULBP-1, His Tag ELISA

0.5µg Human ULBP-1, His Tag Per Well



Immobilized Human ULBP-1, His Tag at 5 µg/ml (100 µl/well) on the plate. Dose response curve for Human NKG2D, hFc Tag with the EC50 of 0.22 µg/ml determined by ELISA.