

## 32-8618: Recombinant Human NKG2D Ligand 1/NKG2DL/ULBP1 (C-Fc)

**Gene :** ULBP1  
**Gene ID :** 80329  
**Uniprot ID :** Q9BZM6

### Description

Source: Human Cells.  
MW :49.4kD.

Recombinant Human NKG2D ligand 1 is produced by our Mammalian expression system and the target gene encoding Gly26-Pro215 is expressed with a Fc tag at the C-terminus. NKG2D ligand 1, also called ULBP1, is a member of UL16-binding protein (ULBP) family which has also been termed the retinoic acid early transcript 1 (RAET1) family. Unlike the classical MHC class I molecules and the MIC molecules possess  $\alpha 1$ ,  $\alpha 2$  and  $\alpha 3$  domains, ULBP/RAET1 family members lack  $\alpha 3$  domain. ULBP1 is recognized by the activating receptor NKG2D on the surface of cytotoxic natural killer (NK) and T cells, and then promotes the lysis of cells expressing ULBP1 which is important for the immune surveillance. ULBP1 and several other family members, ULBP2 and ULBP5, own the ability to bind the human cytomegalovirus (CMV) UL16 glycoprotein. The human CMV glycoprotein UL16 binds to intracellular ULBP1 and so inhibits its expression at the cell surface, which reduces the susceptibility of the virus-infected cell to cytotoxic destruction by NK cells. The expression of ULBP1 has been found on some tumor cells and is implicated in tumor surveillance.

### Product Info

**Amount :** 10  $\mu\text{g}$  / 50  $\mu\text{g}$   
**Content :** Lyophilized from a 0.2  $\mu\text{m}$  filtered solution of PBS, pH7.4.  
**Storage condition :** Lyophilized protein should be stored at  $-20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days. Aliquots of reconstituted samples are stable at  $-20^{\circ}\text{C}$  for 3 months.  
**Amino Acid :** GWVDTHCLCYDFIITPKSRPEPQWCEVQGLVDERPFLHYDCVNHKAKAFASLGKKNVTKTWEEQTETLRDVV DFLKGQLLDIQVENLIPIEPLTLQARMSCEHEAHGHGRGSWQFLFNGQKFLLFDSNNRKWTALHPGAKKMTEK WEKNRDVTMFFQKISLGDCKMWLEEFMYWEQMLDPTKPPSLAPVDDIEGRMDEPKSCDKTHTCPPCPAPEL LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWE SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu\text{g}$  (1 IEU/ $\mu\text{g}$ ) as determined by LAL test.