



20150217ML

# Anti-Human ULBP-2 (#7F33)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>101-M694</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with Human ULBP-2 recombinant protein.

## Target Background

<b>Synonyms (Target):</b>	ULBP2; N2DL2; RAET1H
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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. The name ULBP derives from the original identification of three proteins, ULBP-1, -2, and -3, as ligands for the human cytomegalovirus glycoprotein UL16; they were designated UL16 binding proteins (ULBP). The genes for ULBPs reside in a cluster of ten related genes, six of which encode potentially functional glycoproteins. ULBP-2 has also been described under the names RaeT1H (retinoic acid early transcript), NKG2DL2, and ALCAN-alpha. ULBP-5 is also known as RaeT1G and ULBP-6 is also known as RaeT1L. These proteins are distantly related to MHC class I proteins, but they possess only the alpha 1 and alpha 2 Ig-like domains, and they have no capacity to bind peptide or interact with beta 2-Microglobulin. Some family members, including ULBP-2, are anchored to the membrane via a GPI-linkage, whereas others have transmembrane domains. Engagement of NKG2D results in the activation of cytolytic activity and/or cytokine production by these effector cells. The ULBPs are expressed on some tumor cells and have been implicated in tumor surveillance. Over aa 26-217, ULBP-2 shares 92% and 95% aa sequence identity with the human ULBP-5 and ULBP-6, respectively.

## Database References Target

<b>Protein RefSeq:</b>	NP_079493.1
<b>Uniprot ID:</b>	Q9BZM5
<b>mRNA RefSeq:</b>	NM_025217.2

## Product Specifications

<b>Host</b>	Mouse
<b>Reactivity against</b>	Human
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#7F33)
<b>Isotype</b>	IgG2
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant human ULBP-2
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody was selected for its ability to detect human ULBP-2.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

FC, N

**Recommended usage:**

Flow cytometry: 1:50 - 1:100

Neutralization of Liganden/receptor interaction: Yes

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**



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