

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ULBP-2, ULBP-5, and RAET1L/ULBP-6 in Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant human (rh) ULBP-1, rhULBP-3, and rhULBP-4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ULBP-2 Gly26-Ser217 Accession # Q9BZM5
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Blockade of Receptor-ligand Interaction	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

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 also known as RaeT1G and ULBP-6 also known as RaeT1L. These proteins are distantly related to MHC class I proteins, but they possess only the α1 and α2 Ig-like domains, and they have no capacity to bind peptide or interact with β2-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.

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