

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ULBP-4/RAET1E in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) ULBP-1, rhULBP-2, and rhULBP-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ULBP-4/RAET1E Gly30-Asp225 Accession # Q8TD07
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

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

ULBP-4 (UL16 binding protein 4; also NKG2D Ligand 4, Latel and RAET1E) is a 30-40 kDa glycoprotein member of the MHC Class I family of molecules. It has widespread tissue expression, and is particularly prominent on tumor cells. ULBP4 is a monomeric, non-antigen presenting MHC molecule that does not interact with β_2 -microglobulin. It is a ligand for both TCR $\gamma\delta$ and homodimeric NKG2D, the latter which appears on NK, CD8⁺ and $\gamma\delta$ T cells. NKG2D ligation induces cellular cytotoxicity and cytokine secretion. Mature human ULBP4 is a 234 amino acid (aa) type I transmembrane protein. It contains a 196 aa extracellular region (aa 30-225), and a short 15 aa cytoplasmic domain. Multiple splice variants exist. One shows a five aa substitution for aa 208-263, a second shows a deletion of aa 28-63, a third shows a two aa substitution for aa 208-263, while a fourth possesses an 18 aa substitution for Gly30. Soluble ULBP4 is described to be 35 kDa in size. There is no reported rodent counterpart to ULBP4.

PRODUCT SPECIFIC NOTICES

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