

DESCRIPTION

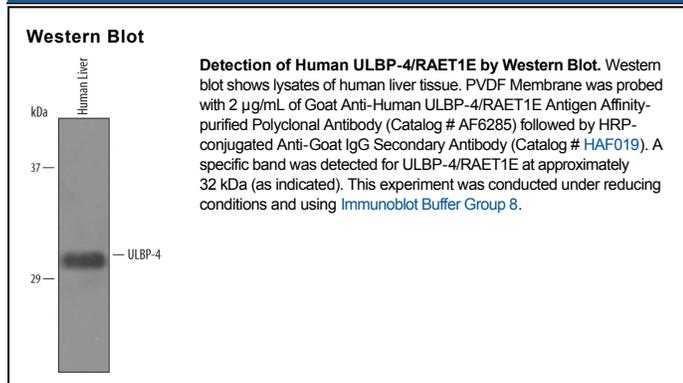
Species Reactivity	Human
Specificity	Detects human ULBP-4/RAET1E in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) ULBP-1, rhULBP-2, and rhULBP-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ULBP-4/RAET1E Gly30-Asp225 Accession # Q8TD07
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 β₂-microglobulin. It is a ligand for both TCRγδ and homodimeric NKG2D, the latter which appears on NK, CD8⁺ and γδ 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.