

DESCRIPTION

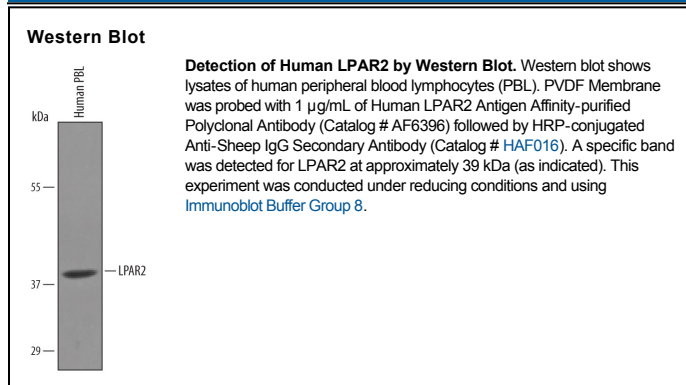
Species Reactivity	Human
Specificity	Detects human LPAR2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human LPAR1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human LPAR2 Met1-Val33, His91-Gly103, Ser168-Ser188, Asp264-Tyr279 Accession # Q9HBW0
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	1 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

LPAR2 (Lysophosphatidic acid receptor 2; also LPA₂ and EDG4) is a 39 kDa member of the GPCR1 family of proteins. It has limited expression, and is found on mammalian macrophages, fibroblasts and cardiac myocytes. LPAR2 binds to, and is activated by LPA, a molecule principally derived from activated platelets. Although LPAR2 appears to prefer myristoyl and palmitoyl LPA, multiple forms of LPA are recognized by the receptor. LPAR2 reportedly mediates chemotaxis, arachidonic acid release, and cell rounding. Human LPAR2 is a 351 amino acid (aa) 7-transmembrane (TM) protein (SwissProt # Q9HBW0). It contains a 33 aa extracellular N-terminus (aa #1-33), seven TM segments (aa #34-297) and a 54 aa C-terminal cytoplasmic tail. There is one splice variant that is associated with tumor cells, and which originally was given the designation EDG4 (endothelium differentiation gene 4). This shows a 35 aa substitution for aa #348-351. Over aa #1-33, 91-103, 168-188 and 264-279 collectively, human LPAR2 shares 75% aa identity with mouse LPAR2.