Human LRP-1B Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6379

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LRP-1B in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) LRP-1, rhLRP-4, rhLRP-5, and rhLRP-6 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human LRP-1B Leu21-Glu244 Accession # Q9NZR2
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.

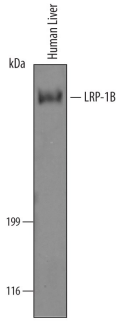
APPLICATIONS

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

Western Blot



Detection of Human LRP-1B by Western Blot. Western blot shows lysates of human liver tissue. PVDF Membrane was probed with 1 µg/mL of Human LRP-1B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6379) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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.** ● 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

LRP-1B (Low density lipoprotein-related protein #1B; also LRP-DIT) is a 600-620 kDa member of the LDLR family of proteins. It is expressed on vascular smooth muscle cells and likely neurons, and binds multiple molecules, including uPA, PAI-1, PDGFRβ uPAR, and Pseudomonas exotoxin. It is considered a tumor suppressor, and appears to block the generation of plasmin. Mature human LRP-1B is a 4579 amino acid (aa) type I transmembrane (TM) glycoprotein. It contains a 4424 aa extracellular domain (ECD) (aa 21-4444) plus a 132 aa cytoplasmic region (aa 4468-4599). In the ECD, there are 32 LDLR class A repeats, 14 EGF-like repeats, and 36 LDLR class B repeats that show an interspersing pattern. In the cytoplasmic region, one NLS (aa 4468-4474) and two endocytosis signal motifs (aa 4492-4562) are found. LRP-B1 is cleaved in the Golgi by furin after Arg3957 to create a noncovalent heterodimer consisting of a 515 kDa ECD, and an 85-95 kDa TM segment. Either uncleaved LRP-1B, or the dissociated heterodimer can undergo additional processing, leading to cleavage of the 90 kDa TM segment after Lys4435. This creates a 21 kDa TM C-terminal fragment that can undergo further γ-secretase processing to generate a cytoplasmic, 18 kDa peptide that translocates to the nucleus. Over aa 21-244, human LRP-1B shares 81% aa identity with mouse LRP-1B.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956