

# **Human LRP-4 Antibody**

Monoclonal Mouse IgG<sub>2A</sub> Clone # 814334 Catalog Number: MAB59481

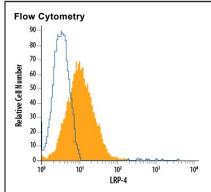
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human LRP-4 in ELISAs.		
Source	Monoclonal Mouse IgG <sub>2A</sub> Clone # 814334		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human LRP-4 Ser21-Ser1725 (predicted) Accession # O75096		
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
Flow Cytometry	2.5 μg/10 <sup>6</sup> cells	See Below

#### DATA



Detection of LRP-4 in U-87 MG Human Cell Line by Flow Cytometry. U-87 MG human glioblastoma/astrocytoma cell line was stained with Mouse Anti-Human LRP-4 Monoclonal Antibody (Catalog # MAB59481, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Phycoerythrinconjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

## PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.5 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

- 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-4 (Low density lipoprotein-related protein #4; also MEGF7 and LRP13) is a 220-270 kDa glycoprotein, member of the LDLR family of proteins. It is expressed on neurons, oocytes, spermatogonia and skeletal muscle cells, and binds multiple ligands, including WISE, apoE, MuSK and neuronal Agrin. It serves to negatively regulate Wnt signaling during development, and to cluster AChRs at neuromuscular junctions. Mature human LRP-4 is an 1885 amino acid (aa) type I transmembrane glycoprotein. It contains a 1705 aa extracellular domain (ECD) (aa 21-1725) plus a 159 aa cytoplasmic region (aa 1747-1905). In the ECD, there are eight LDLR class A repeats (aa 26-350), two EGF-like repeats (aa 354-434) and 20 LDLR class B repeats that contain an intervening EGF-like domain (aa 480-1610). Over aa 18-344, human LRP-4 shares 88% aa sequence identity with mouse LRP-4.

