

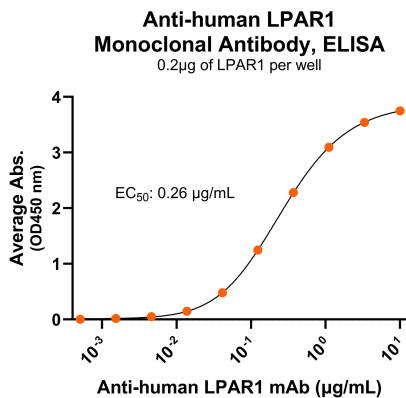
Alternate Names	LPA1
Isotype	IgG2a, kappa
Conjugate	Unconjugated
Background	Human lysophosphatidic acid receptor 1 (LPAR1) is a Class A G protein-coupled receptor (GPCR) with seven transmembrane helices on the cell surface. LPAR1 is found in almost all human tissues but is the most highly expressed in the brain. It is involved in reorganization of the actin cytoskeleton, cell migration, differentiation and proliferation, as well as contributing to the responses to tissue damage and infectious agents, neuroblastoma cell differentiation inhibition, chemotaxis, and tumor cell invasion. Deletion of the LPAR1 gene causes neurodevelopmental disorders and central nervous system diseases such as brain cancer, and neuropsychiatric disorders. Human LPAR1 protein has ~99% and ~97% sequence homology with macaque and mouse LPAR1, respectively.

Product Details

Specificity	Human lysophosphatidic acid receptor 1/LPAR1
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	LPAR1 N-terminus, the exact sequence of the immunogen is proprietary.; UniProt # Q92633
Formulation / Storage buffer	0.22µm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice
Purification	Affinity Enrichment
Stability & Storage	-80°C
Verified Application	ELISA, SPR
Recommended Usage	ELISA: starting concentration 1 µg/mL. LSPR: Recommended maximum concentration, 100 nM

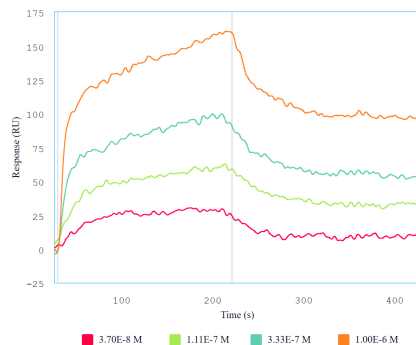
Bioactive Data, Detection of Antigen by:

ELISA



Immobilized human LPAR1 at 2 µg/mL (100 µL/well) can bind anti-human LPAR1 monoclonal antibody (Cat. No. CABh-24026) with half maximal effective concentration (EC₅₀) range of 0.1-0.5 µg/mL (QC tested).

SPR



Immobilized human LPAR1 peptide can bind Mouse Anti-Human LPAR1 Monoclonal Antibody (Cat. No. CABh-24026) with a K_D of 24.6-98.4 nM as determined by LSPR (Nicoya Alto).

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	Regulation of cell proliferation, migration, survival, apoptosis, and morphology
Ligand / Receptor	lysophosphatidic acid (LPA)
Cell Type	Central nervous system cells
Molecular Family	G protein-coupled receptor
Gene ID	Q92633