Anti-Human APLNR Monoclonal Antibody
Product Code: CABh-25301
Clone: 4C2-H8
For Research Use Only (RUO)

Alternate Names	AGTRL1, APJ, APJR, HG11
Isotype	IgG2a
Conjugate	Unconjugated
Background	Human Apelin receptor (APLNR), also known as APJ receptor, is a 7-transmembrane G protein-coupled receptor (GPCR). It is a Class A GPCR. APLNR plays a critical role in cardiovascular, metabolic, and developmental processes. It is activated by endogenous peptide ligands, primarily apelin and ELABELA (also called Toddler), which bind to the receptor and trigger intracellular signaling pathways. Dysregulation of the apelin–APLNR system has been linked to diseases such as heart failure, hypertension, diabetes, and obesity.

Product Details

Specificity	Detects human Apelin receptor/APLNR transfectants but not irrelevant transfectants in flow cytometry.
Antibody Type	Monoclonal antibody
Host Species	Mouse
Immunogen	APLNR N-terminus extracellular domain, the exact sequence of the immunogen is proprietary.; UniProt # P35414
Formulation / Storage buffer	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant
Reconstitution	For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL. Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing. For 25µg product size: Reconstitute with 50 µL sterile deionized water. For 100µg product size: Reconstitute with 200 µL sterile deionized water.

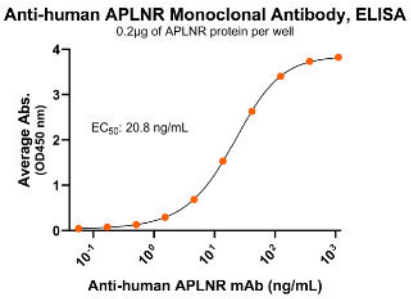
Anti-Human APLNR Monoclonal Antibody
Product Code: CABh-25301
Clone: 4C2-H8
For Research Use Only (RUO)

Shipping	Product is shipped at ambient temperature.
Purification	Affinity Enrichment
Stability & Storage	On receipt, store at -20 C or lower for long term storage. This product is stable at: -20 to -70 C for 12 months from date of receipt in lyophilized state. -70 C for 3 months after reconstitution under sterile conditions. Avoid repeated freeze-thaw cycles
Verified Application	ELISA, Flow cytometry
Recommended Usage	ELISA: starting concentration 1 µg/mL Flow cytometry: 0.8 µg/1E6 cells

Anti-Human APLNR Monoclonal Antibody
Product Code: CABh-25301
Clone: 4C2-H8
For Research Use Only (RUO)

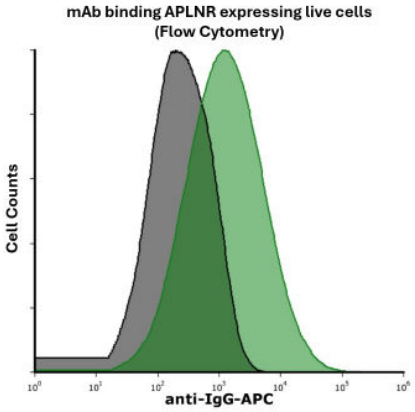
Bioactive Data, Detection of Antigen by:

ELISA



Immobilized human APLNR fragment at 2 μg/mL (100 μL/well) can bind mouse Anti-human APLNR Monoclonal Antibody (Cat. No. CABh-25301) with half maximal effective concentration (EC50) range of 10.4-41.6 ng/mL (QC tested).

Flow Cytometery



Detection of APLNR in HEK293 human cell line transiently transfected with human APLNR by Flow Cytometry. HEK293 cell line transfected with human APLNR was stained with isotype control (black curve) or Mouse Anti-Human APLNR Monoclonal Antibody (Cat. No. CABh-25301) (green curve) by APC-conjugated Anti-Mouse IgG Secondary Antibody.

Anti-Human APLNR Monoclonal Antibody
Product Code: CABh-25301
Clone: 4C2-H8
For Research Use Only (RUO)

Antigen Details

Structure	7-transmembrane protein, G protein-coupled receptor (GPCR)
Function	Cardiovascular, metabolic, and developmental processes
Ligand / Receptor	Apelin and ELABELA (also called Toddler)
Cell Type	Wide distribution, especially in the cardiovascular and endothelial systems
Molecular Family	G protein-coupled receptor
Gene ID	P35414