



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

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<b>Alternate Names</b>	AGTRL1, APJ, APJR, HG11
<b>Isotype</b>	IgG2a
<b>Conjugate</b>	Unconjugated
<b>Background</b>	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

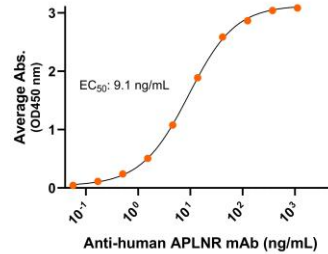
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<b>Specificity</b>	Detects human Apelin receptor/APLNR transfectants but not irrelevant transfectants in flow cytometry.
<b>Antibody Type</b>	Monoclonal antibody
<b>Host Species</b>	Mouse
<b>Immunogen</b>	APLNR N-terminus extracellular domain, the exact sequence of the immunogen is proprietary.; UniProt # P35414
<b>Formulation / Storage buffer</b>	0.22µm filtered PBS, pH 7.4
<b>Shipping</b>	Frozen Dry Ice
<b>Purification</b>	Affinity Enrichment
<b>Stability &amp; Storage</b>	-80°C
<b>Verified Application</b>	ELISA, Flow cytometry
<b>Recommended Usage</b>	ELISA: starting concentration 1 µg/mL Flow cytometry: 0.8 µg/1E6 cells

## Bioactive Data, Detection of Antigen by:

### ELISA

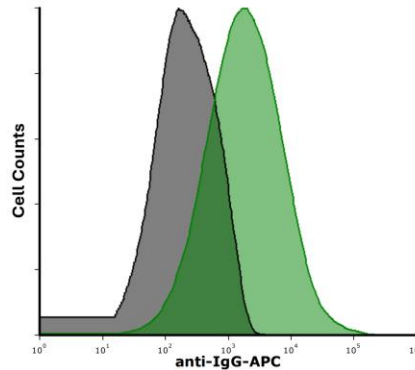
Anti-human APLNR Monoclonal Antibody, ELISA  
 0.2µg of APLNR protein per well



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 (EC<sub>50</sub>) range of 4.5-18.2 ng/mL (QC tested).

### Flow Cytometry

mAb binding APLNR expressing live cells  
 (Flow Cytometry)



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.



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### Antigen Details

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