

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain)

Rabbit Polyclonal Antibody Catalog # ALS10022

Specification

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Product Information

Application IHC
Primary Accession P35414
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 43kDa KDa

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Additional Information

Gene ID 187

Other Names

Apelin receptor, Angiotensin receptor-like 1, G-protein coupled receptor APJ, G-protein coupled receptor HG11, APLNR, AGTRL1, APJ

Target/Specificity

Human Apelin Receptor. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Protein Information

Name APLNR

Synonyms AGTRL1, APJ

Function

Receptor for apelin receptor early endogenous ligand (APELA) and apelin (APLN) hormones coupled to G proteins that inhibit adenylate cyclase activity (PubMed:11090199, PubMed:25639753, PubMed:28137936). Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a receptor for APELA hormone (By similarity). May promote angioblast migration toward the embryonic midline, i.e. the position of the future vessel formation, during vasculogenesis (By similarity). Promotes sinus venosus (SV)-derived endothelial cells migration





into the developing heart to promote coronary blood vessel development (By similarity). Also plays a role in various processes in adults such as regulation of blood vessel formation, blood pressure, heart contractility and heart failure (PubMed:25639753, PubMed:28137936).

Cellular Location

Cell membrane. Note=After exposure to apelin (APLN), internalized from the cell surface into an endosomal recycling compartment, from where it is recycled to the cell membrane (By similarity). After exposure to apelin receptor early endogenous ligand (APELA), internalized from the cell surface into an endosomal recycling compartment, from where it is recycled to the cell membrane (PubMed:25639753) {ECO:0000250|UniProtKB:Q9|HG3, ECO:0000269|PubMed:25639753}

Tissue Location

Expressed in heart, brain, kidney, stomach, spleen, thymus, lung, ovary, small intestine and colon, adipose tissues and pancreas (PubMed:8294032, PubMed:25639753). Expressed in glial cells, astrocytes and neuronal subpopulations (PubMed:8294032). Expressed in embryonic (ESCs) and induced (iPSCs) pluripotent stem cells (PubMed:25639753).

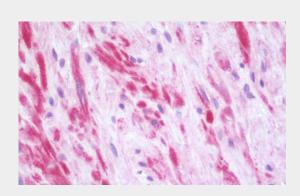
Volume 50 µl

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

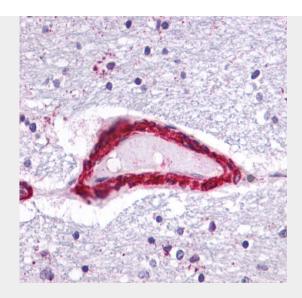
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Images



Human Prostate: Formalin-Fixed, Paraffin-Embedded (FFPE)





Anti-APLNR/ Apelin Receptor / APJ antibody IHC of human brain vessel.

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - Background

Receptor for apelin coupled to G proteins that inhibit adenylate cyclase activity and plays a role in various processes in adults such as regulation of blood pressure, heart contractility, and heart failure. Also plays a key role in early development such as gastrulation and heart morphogenesis by acting as a receptor for APELA hormone. Alternative coreceptor with CD4 for HIV-1 infection; may be involved in the development of AIDS dementia.

APLNR/ Apelin Receptor / APJ Antibody (Cytoplasmic Domain) - References

O'Dowd B.F., et al.Gene 136:355-360(1993). Eggerickx D., et al.Submitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.