

APLNR Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP14123c**Specification****APLNR Antibody (Center) Blocking peptide -
Product Information**Primary Accession [P35414](#)**APLNR Antibody (Center) Blocking peptide -
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**The synthetic peptide sequence used to
generate the antibody AP14123c was
selected from the Center region of APLNR. A
10 to 100 fold molar excess to antibody is
recommended. Precise conditions should be
optimized for a particular assay.**Format**Peptides are lyophilized in a solid powder
format. Peptides can be reconstituted in
solution using the appropriate buffer as
needed.**Storage**Maintain refrigerated at 2-8°C for up to 6
months. For long term storage store at
-20°C.**Precautions**This product is for research use only. Not
for use in diagnostic or therapeutic
procedures.**APLNR Antibody (Center) Blocking peptide -
Protein Information****Name** APLNR**Synonyms** AGTRL1, APJ**APLNR Antibody (Center) Blocking peptide
- Background**

This gene encodes a member of the G
protein-coupled receptor gene family. The
encoded protein is related to the angiotensin
receptor, but is actually an apelin receptor
that inhibits adenylate cyclase activity and
plays a counter-regulatory role against the
pressure action of angiotensin II by
exerting a hypotensive effect. It functions in the
cardiovascular and central nervous systems, in
glucose metabolism, in embryonic and
tumor angiogenesis and as a human
immunodeficiency virus (HIV-1) coreceptor. Two
transcript variants resulting from
alternative splicing have been identified.

**APLNR Antibody (Center) Blocking peptide
- References**

Tao, Y., et al. Invest. Ophthalmol. Vis. Sci.
51(8):4237-4242(2010) Zhao, Q., et al. Am. J.
Hypertens. 23(6):606-613(2010) Lee, D.K., et
al. Biochem. Biophys. Res. Commun.
395(2):185-189(2010) Falcao-Pires, I., et al.
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14(3):231-241(2010) Peltonen, T., et al. J. Heart
Valve Dis. 18(6):644-652(2009)

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). Plays also 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:Q9JHG3,
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).

APLNR Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)