10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Aplnr antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14483

Product Information

Application	WB
Primary Accession	Q9WV08
Other Accession	NM_011784, NP_035914
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Horse
Predicted	Human, Mouse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42266

Additional Information

Gene ID	23796
Alias Symbol	APJ, Agtrl1, msr/apj
Other Names	Apelin receptor, Angiotensin receptor-like 1, G-protein coupled receptor APJ, MSR, Aplnr, Agtrl1, Apj
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Aplnr antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Aplnr antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

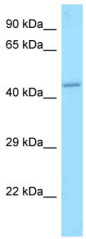
Name	Aplnr {ECO:0000312|MGI:MGI:1346086}
Synonyms	Agtrl1, Apj
Function	G protein-coupled receptor for peptide hormones apelin (APLN) and apelin receptor early endogenous ligand (APELA), that plays a role in the regulation of normal cardiovascular function and fluid homeostasis (PubMed:22810587, PubMed:28663440, PubMed:28854362, PubMed:28890073). When acting as apelin receptor, activates both G(i) protein pathway that inhibits adenylate cyclase activity, and the beta- arrestin pathway leading to internalization of the receptor (PubMed:22810587, PubMed:28663440, PubMed:28854362, PubMed:28890073). APLNR/APJ receptor is also activated by mechanical

	strech in a G- protein-independent fashion to induce beta-arrestin signaling leading to cardiac hypertrophy (PubMed:22810587). However, the presence of apelin ligand blunts cardiac hypertrophic induction from APLNR/APJ on response to pathological stimuli (PubMed:22810587). Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a receptor for APELA hormone (PubMed:28663440, PubMed:28854362, PubMed:28890073). 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 (PubMed:28890073). Also plays a role in various processes in adults such as regulation of blood vessel formation, blood pressure and heart contractility and protection from cardiac hypertrophy and heart failure (PubMed:22810587, PubMed:28371822).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P35414}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P79960}. Note=After exposure to apelin (APLN) or 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 {ECO:0000250|UniProtKB:P35414, ECO:0000250|UniProtKB:Q9JHG3}
Tissue Location	Expressed in coronary endothelial cells (at protein level) (PubMed:28890073). Expressed in the embryo, allantoic and endothelial precursor cells of the yolk sac at 8 days post-coitum (dpc) (PubMed:28663440). Expressed in the secondary heart field and somite at 8.25 dpc (PubMed:28854362). Expressed in fetal allantoic endothelial cells at 9 dpc (PubMed:28663440). Expressed in the allantoid and the invading fetal vasculature of the placenta at 9.5 dpc (PubMed:28854362). Expressed in endothelial cells adjacent to syncytiotrophoblast cells at 10.5 dpc (PubMed:28663440). Expressed weakly in the embryonic heart at 11.5 dpc (PubMed:26611206). Expressed in the adult heart (PubMed:26611206). Expressed in endothelial cells and cardiomyocytes and weakly expressed in fibroblasts (PubMed:10473142, PubMed:26611206).

References

Devic E.,et al.Mech. Dev. 84:199-203(1999).
Carninci P.,et al.Science 309:1559-1563(2005).

Images



WB Suggested Anti-Aplnr Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Pancreas

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.