

Catalog # AP52194

Rabbit Anti-APJ Receptor Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab)

Specification

Rabbit Anti-APJ Receptor Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC-P, FC <u>P35414</u> Human, Mouse, Rat Rabbit Polyclonal 42660

Rabbit Anti-APJ Receptor Polyclonal Antibody - Additional Information

Gene ID 187

Other Names APJ; APJR; HG11; AGTRL1; Apelin receptor; Angiotensin receptor-like 1; G-protein coupled receptor APJ; G-protein coupled receptor HG11; APLNR

Dilution WB~~1:100~1:500<br \>IHC-P~~1:100~1:500<br \>FC~~1:20~1:100

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Rabbit Anti-APJ Receptor Polyclonal Antibody - 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: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:Q9JHG3, ECO:0000269|PubMed:25639753}

Tissue Location

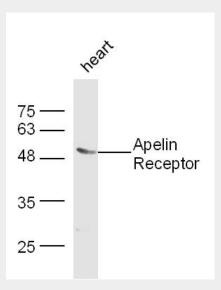
Expressed in heart, brain, kidney, stomach, spleen, thymus, lung, ovary, small intestine and colon, adipose tissues and pancreas (PubMed:8294032, PubMed:25639753). Expressed in glial cells, astrocytes and neuronal subpopulations (PubMed:8294032). Expressed in embryonic (ESCs) and induced (iPSCs) pluripotent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

Rabbit Anti-APJ Receptor Polyclonal Antibody - Protocols

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

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

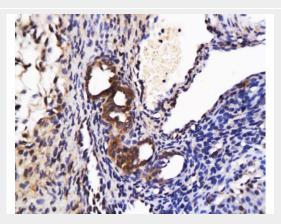
Rabbit Anti-APJ Receptor Polyclonal Antibody - Images



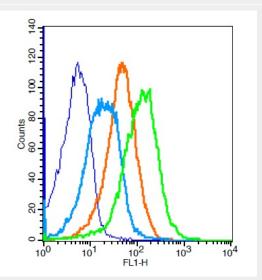
Mouse heart lysates probed with Rabbit Anti-APJ Receptor Polyclonal Antibody, Unconjugated (AP52194) at 1:300 overnight at 4°C. Followed by conjugation to secondary antibody at 1:500 for



90 min at 37°C.



Formalin-fixed and paraffin-embedded : rat ovary tissue labeled with Rabbit Anti-APELIN RECEPTOR Polyclonal Antibody, Unconjugated(AP52194) 1:200 followed by conjugation to the secondary antibody and DAB staining



Mouse splenocytes probed with Rabbit Anti-APJ Receptor Polyclonal Antibody, Unconjugated (AP52194) at 1:100 for 30 minutes followed by incubation with a FITC conjugated secondary (green) for 30 minutes compared to control cells (blue), secondary only (light blue) and isotype control (orange).

Rabbit Anti-APJ Receptor Polyclonal Antibody - 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.