

**Anti-APJ Antibody**  
Rabbit polyclonal antibody to APJ  
Catalog # AP59962

## Specification

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### Anti-APJ Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P35414</a>
Other Accession	<a href="#">O9WV08</a>
Reactivity	Human, Mouse, Rat, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42660

### Anti-APJ Antibody - Additional Information

Gene ID 187

#### Other Names

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

#### Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human APJ. The exact sequence is proprietary.

#### Dilution

WB~~WB (1/500 - 1/1000)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### Anti-APJ Antibody - Protein Information

Name APLNR ([HGNC:339](#))

Synonyms AGTRL1, APJ

#### Function

G protein-coupled receptor for peptide hormones apelin (APLN) and apelin receptor early endogenous ligand (APELA/ELA), that plays a role in the regulation of normal cardiovascular function and fluid homeostasis (PubMed: [11090199](http://www.uniprot.org/citations/11090199), PubMed: [22810587](http://www.uniprot.org/citations/22810587), PubMed: [25639753](http://www.uniprot.org/citations/25639753))

target="\_blank">25639753</a>, PubMed:<a href="http://www.uniprot.org/citations/28137936" target="\_blank">28137936</a>, PubMed:<a href="http://www.uniprot.org/citations/35817871" target="\_blank">35817871</a>, PubMed:<a href="http://www.uniprot.org/citations/38428423" target="\_blank">38428423</a>). When acting as apelin receptor, activates both G(i) protein pathway that inhibits adenylate cyclase activity, and the beta-arrestin pathway that promotes internalization of the receptor (PubMed:<a href="http://www.uniprot.org/citations/11090199" target="\_blank">11090199</a>, PubMed:<a href="http://www.uniprot.org/citations/25639753" target="\_blank">25639753</a>, PubMed:<a href="http://www.uniprot.org/citations/28137936" target="\_blank">28137936</a>, PubMed:<a href="http://www.uniprot.org/citations/35817871" target="\_blank">35817871</a>, PubMed:<a href="http://www.uniprot.org/citations/38428423" target="\_blank">38428423</a>). APLNR/APJ also functions as mechanoreceptor that is activated by pathological stimuli in a G-protein-independent fashion to induce beta-arrestin signaling, hence eliciting cardiac hypertrophy (PubMed:<a href="http://www.uniprot.org/citations/22810587" target="\_blank">22810587</a>, PubMed:<a href="http://www.uniprot.org/citations/38428423" target="\_blank">38428423</a>). However, the presence of apelin ligand blunts cardiac hypertrophic induction from APLNR/APJ on response to pathological stimuli (PubMed:<a href="http://www.uniprot.org/citations/22810587" target="\_blank">22810587</a>, PubMed:<a href="http://www.uniprot.org/citations/38428423" target="\_blank">38428423</a>). Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a APELA receptor (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:<a href="http://www.uniprot.org/citations/25639753" target="\_blank">25639753</a>, PubMed:<a href="http://www.uniprot.org/citations/28137936" target="\_blank">28137936</a>).

#### 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

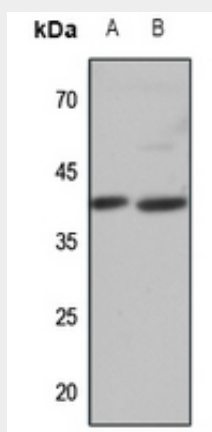
Expressed in heart, brain, kidney, stomach, spleen, thymus, lung, ovary, small intestine and colon, adipose tissues and pancreas (PubMed:25639753, PubMed:8294032). Expressed in glial cells, astrocytes and neuronal subpopulations (PubMed:8294032). Expressed in embryonic (ESCs) and induced (iPSCs) pluripotent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

#### Anti-APJ Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-APJ Antibody - Images



Western blot analysis of APJ expression in H460 (A), mouse lung (B) whole cell lysates.

#### **Anti-APJ Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human APJ. The exact sequence is proprietary.