

**Anti-Apelin Antibody (C-Terminus)**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS18454****Specification**

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**Anti-Apelin Antibody (C-Terminus) - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O9ULZ1</a>
Predicted	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8569
Dilution	WB~~1:1000 IHC-P~~N/A

**Anti-Apelin Antibody (C-Terminus) - Additional Information****Gene ID 8862**

Alias Symbol	APLN
<b>Other Names</b>	
APLN, AGTRL1 ligand, Apelin, APEL, Preproapelin, APJ endogenous ligand, XNPEP2	

**Target/Specificity**

Recognizes endogenous levels of Apelin protein.

**Reconstitution & Storage**

Immunoaffinity purified

**Precautions**

Anti-Apelin Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-Apelin Antibody (C-Terminus) - Protein Information**

**Name** APLN ([HGNC:16665](#))

**Synonyms** APEL

**Function**

Peptide hormone that functions as endogenous ligand for the G-protein-coupled apelin receptor (APLNR/APJ), that plays a role in cardiovascular homeostasis (PubMed:<a href="http://www.uniprot.org/citations/10525157" target="\_blank">10525157</a>, PubMed:<a href="http://www.uniprot.org/citations/22810587" target="\_blank">22810587</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>). Functions as a balanced agonist activating both G(i) protein pathway and beta-arrestin pathway of APLNR (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>). Downstream G proteins activation, apelin can inhibit cAMP production and activate key intracellular effectors such as ERKs (PubMed:<a href="http://www.uniprot.org/citations/22810587" target="\_blank">22810587</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>). On the other hand, APLNR activation induces beta- arrestin recruitment to the membrane leading to desensitization and internalization of the receptor (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>). Apelin blunts cardiac hypertrophic induction from APLNR on response to pathological stimuli, but also induces myocardial hypertrophy under normal conditions (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>). Apelin-36 dissociates more hardly than (pyroglu)apelin-13 from APLNR (By similarity). Involved in the regulation of cardiac precursor cell movements during gastrulation and heart morphogenesis (By similarity). Has an inhibitory effect on cytokine production in response to T-cell receptor/CD3 cross-linking; the oral intake of apelin in the colostrum and the milk might therefore modulate immune responses in neonates (By similarity). Plays a role in early coronary blood vessels formation (By similarity). Mediates myocardial contractility in an ERK1/2-dependent manner (By similarity). May also have a role in the central control of body fluid homeostasis by influencing vasopressin release and drinking behavior (By similarity).

#### **Cellular Location**

Secreted {ECO:0000250|UniProtKB:Q9TUI9}. Secreted, extracellular space. Note=Abundantly secreted in the colostrum. Lower level in milk. Decreases rapidly within several days after parturition in milk, but is still detectable even in commercial milk. {ECO:0000250|UniProtKB:Q9TUI9}

#### **Tissue Location**

Expressed in the brain with highest levels in the frontal cortex, thalamus, hypothalamus and midbrain (PubMed:10617103) Secreted by the mammary gland into the colostrum and the milk

### **Anti-Apelin Antibody (C-Terminus) - 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-Apelin Antibody (C-Terminus) - Images**