

Anti-Apelin Antibody (C-Terminus)

Rabbit Anti Human Polyclonal Antibody Catalog # ALS18454

Specification

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

Application WB, IHC-P Primary Accession Q9ULZ1

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

Other Names

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 cadiovascular homeostasis (PubMed:10525157, PubMed:22810587, PubMed:35817871, PubMed:38428423). Functions as a balanced agonist activating both G(i) protein pathway and beta-arrestin pathway of APLNR (PubMed:22810587,



PubMed:38428423). Downstream G proteins activation, apelin can inhibit cAMP production and activate key intracellular effectors such as ERKs (PubMed:22810587, PubMed:35817871, PubMed:38428423). On the other hand, APLNR activation induces beta- arrestin recruitment to the membrane leading to desensitization and internalization of the receptor (PubMed:22810587, PubMed:38428423). Apelin blunts cardiac hypertrophic induction from APLNR on response to pathological stimuli, but also induces myocardial hypertrophy under normal conditions (PubMed: 22810587, PubMed:38428423). 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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Apelin Antibody (C-Terminus) - Images