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Anti-Apelin Antibody (C-Terminus)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18454

Product Information

Application	WB, IHC-P
Primary Accession	Q9ULZ1
Predicted	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8569
Concentration (mg/ml)	1 mg/ml

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.

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