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Apelin Polyclonal Antibody

Catalog # AP73346

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9ULZ1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8569

Additional Information

Gene ID	8862
Other Names	APLN; APEL; Apelin; APJ endogenous ligand
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

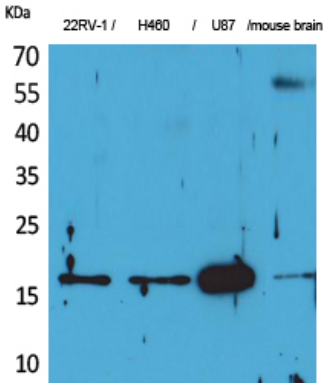
Name	APLN (HGNC:16665)
Synonyms	APEL
Function	Peptide hormone that functions as endogenous ligand for the G protein-coupled apelin receptor (APLNR/APJ), that plays a role in cadiovascular homeostasis (PubMed:10525157, PubMed:22810587, PubMed:35817871, PubMed:38428423). Functions as a balanced agonist 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

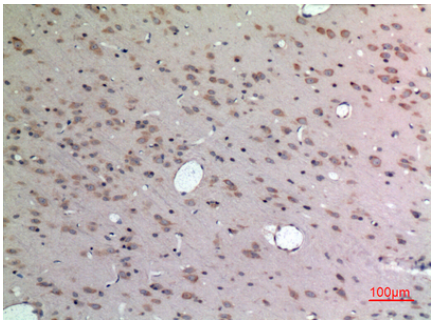
Background

Endogenous ligand for the apelin receptor (APLNR) (PubMed: 10525157). Drives internalization of the apelin receptor (By similarity). Apelin-36 dissociates more hardly than (pyroglu)apelin-13 from APLNR (By similarity). Hormone 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).

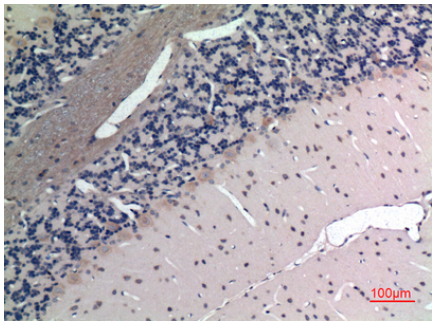
Images



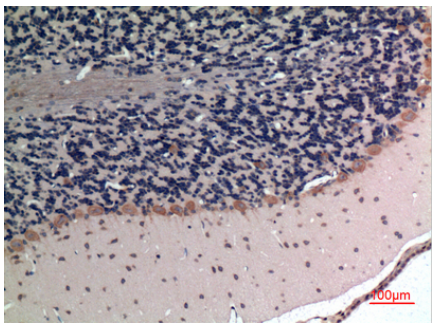
Western Blot analysis of 22RV-1, H460, U87, mouse brain cells using Apelin Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.