

Apelin Polyclonal Antibody
Catalog # AP73346**Specification****Apelin Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	Q9ULZ1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Apelin Polyclonal Antibody - 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~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Apelin Polyclonal Antibody - 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: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).

target="_blank">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

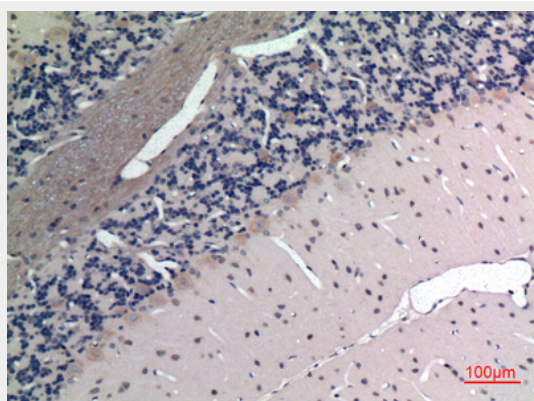
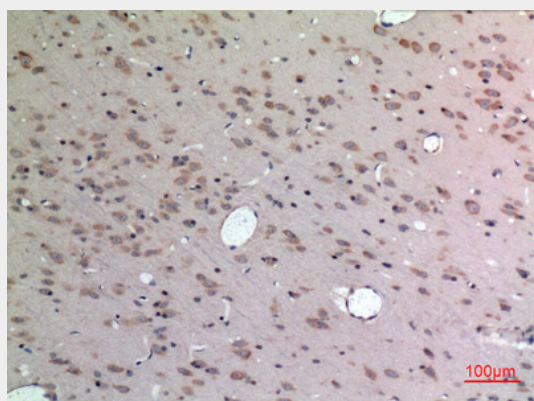
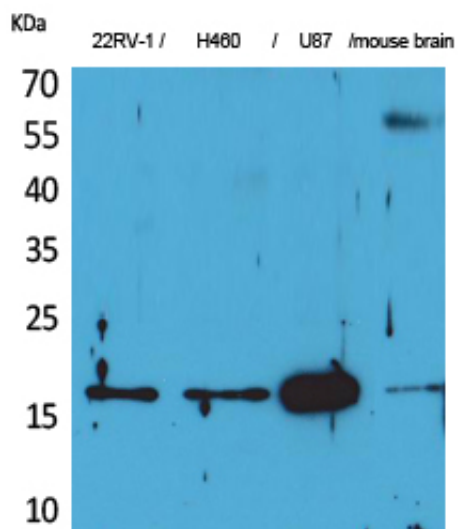
Apelin Polyclonal Antibody - Protocols

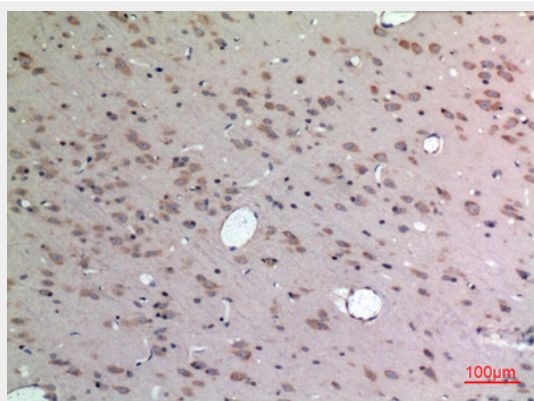
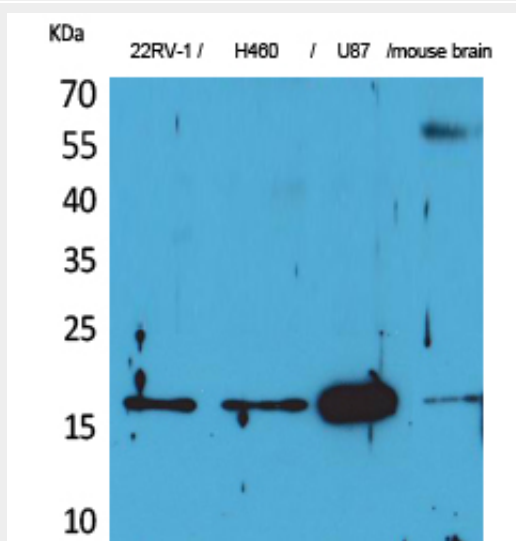
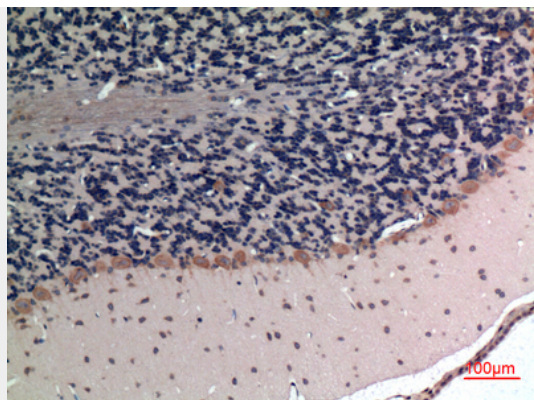
Provided below are standard protocols that you may find useful for product applications.

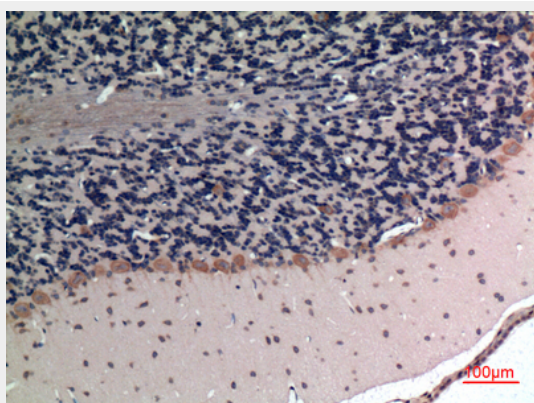
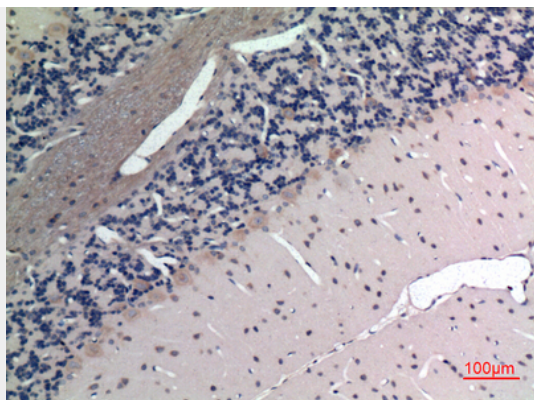
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Apelin Polyclonal Antibody - Images









Apelin Polyclonal Antibody - 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).