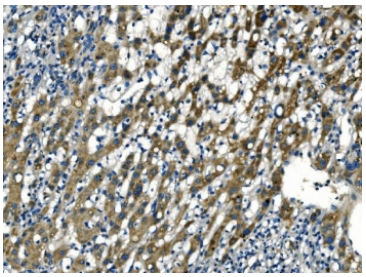
APLN Antibody / APJ Receptor Ligand Antibody (RQ7057)

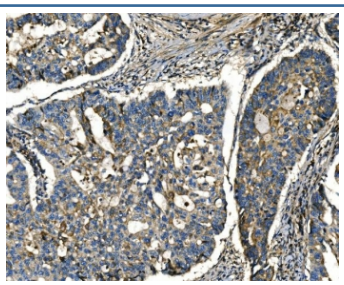
Catalog No.	Formulation	Size
RQ7057	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

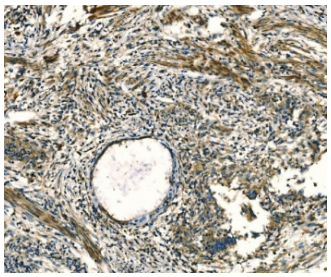
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9ULZ1
Applications	Immunohistochemistry (FFPE): 2-5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This APLN Antibody / APJ Receptor Ligand Antibody is available for research use only.



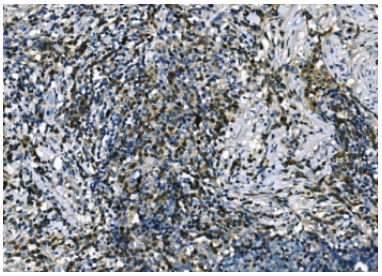
APLN Antibody Human Liver Cancer IHC. IHC staining of FFPE human liver cancer tissue was performed with APLN Antibody following heat-induced epitope retrieval by boiling tissue sections in pH 8 EDTA buffer for 20 min and allowing them to cool before testing. APLN staining is observed predominantly in the cytoplasm of tumor cells, with widespread positive staining throughout the tissue. This APLN Antibody demonstrates localization of APJ Receptor Ligand in human liver cancer tissue.



APLN Antibody Human Right Colon Adenocarcinoma IHC. IHC staining of FFPE human right colon adenocarcinoma tissue was performed with APLN Antibody following heat-induced epitope retrieval by boiling tissue sections in pH 8 EDTA buffer for 20 min and allowing them to cool before testing. APLN staining is observed predominantly in the cytoplasm of tumor cells, with variable staining intensity across the tissue. This APLN Antibody demonstrates localization of APJ Receptor Ligand in human colorectal adenocarcinoma tissue.



APLN Antibody Human Cervical Cancer IHC. IHC staining of FFPE human cervical cancer tissue was performed with APLN Antibody following heat-induced epitope retrieval by boiling tissue sections in pH 8 EDTA buffer for 20 min and allowing them to cool before testing. APLN staining is observed in tumor and stromal regions, with predominantly cytoplasmic staining. This APLN Antibody demonstrates localization of APJ Receptor Ligand in human cervical cancer tissue.



APLN Antibody Human Lung Cancer IHC. IHC staining of FFPE human lung cancer tissue was performed with APLN Antibody following heat-induced epitope retrieval by boiling tissue sections in pH 8 EDTA buffer for 20 min and allowing them to cool before testing. APLN staining is observed predominantly in the cytoplasm of tumor cells, with heterogeneous positive staining across the cancer tissue. This APLN Antibody demonstrates localization of APJ Receptor Ligand in human lung cancer tissue.

Description

APLN Antibody / APJ Receptor Ligand Antibody detects apelin, a secreted peptide hormone encoded by the APLN gene and an endogenous ligand for the G protein-coupled apelin receptor APLNR, also known as APJ. Apelin is synthesized as a preproprotein that undergoes proteolytic processing to generate multiple biologically active peptides. These include apelin-36, apelin-17 and apelin-13, which participate in signaling through APLNR and can differ in receptor binding, stability and biological activity.

The apelin-APLNR signaling system has important functions in cardiovascular physiology. Apelin signaling can influence vascular tone, cardiac contractility, fluid homeostasis and blood pressure regulation. APLN is expressed in several cardiovascular cell populations, and the pathway is studied in relation to endothelial function, vascular remodeling and cardiac responses to physiological and pathological stress. An APLN Antibody can support research examining apelin expression and distribution within these systems.

APLN is also associated with angiogenesis and vascular development. Signaling through the APJ receptor contributes to endothelial cell behavior and blood vessel formation, making the apelin pathway relevant to developmental biology, tissue remodeling and cancer research. Altered apelin signaling has been investigated in tumor vascularization and other conditions characterized by changes in vascular growth or function.

Beyond the cardiovascular system, apelin participates in metabolic and endocrine regulation. The apelin-APJ pathway has been studied in glucose metabolism, insulin sensitivity, adipose tissue biology, energy balance and fluid regulation. Its broad physiological roles have made APLN an important target for investigating how peptide hormone signaling coordinates cardiovascular, metabolic and vascular responses.

NSJ Bioreagents offers APLN Antibody reagents for investigating apelin expression and localization. An APJ Receptor Ligand Antibody can support studies of apelin-APLNR signaling, cardiovascular biology, angiogenesis, vascular function, metabolic regulation and mechanisms involving this peptide ligand-GPCR signaling system.

Researchers studying APLN and apelin-APJ signaling can explore our GPCR Antibodies page for additional targets involved in G protein-coupled receptor signaling, cardiovascular regulation and cellular communication.

Application Notes

Optimal dilution of the APLN Antibody / APJ Receptor Ligand Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids S24-F77) was used as the immunogen for the APLN antibody.

Storage

After reconstitution, the APLN antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

APLN antibody, APJ Receptor Ligand antibody, Apelin Preproprotein antibody, Apelin Precursor antibody, APEL antibody

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