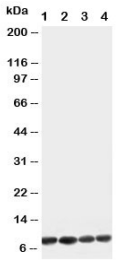
Apelin Antibody / APEL Antibody (R30574)

Catalog No.	Formulation	Size
R30574	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q9ULZ1
Applications	Western blot: 0.5-1ug/ml
Limitations	This Apelin Antibody / APEL Antibody is available for research use only.



Apelin Antibody Human Cancer Cell WB. Western blot analysis was performed with Apelin Antibody / APEL Antibody on human U87 glioblastoma (lane 1), MCF-7 breast cancer (lane 2), HeLa cervical cancer (lane 3) and MDA-MB-453 breast cancer cell lysates (lane 4). A consistent band is detected at approximately 8 kDa across all four cell lines. This Apelin Antibody demonstrates detection of Apelin Preproprotein / APEL in multiple human cancer cell lines.

Description

Apelin Antibody / APEL Antibody detects apelin, a peptide hormone encoded by the APLN gene and historically associated with the APEL designation. Apelin is synthesized as a preproprotein that undergoes proteolytic processing to generate multiple biologically active peptides, including apelin-36, apelin-17 and apelin-13. These peptides function as endogenous ligands for APLNR, a G protein-coupled receptor also known as APJ, establishing the apelin-APJ signaling system.

Apelin signaling has important functions in cardiovascular and vascular biology. Activation of the APJ receptor can

influence vascular tone, cardiac contractility, blood pressure and fluid homeostasis. Apelin is also involved in endothelial cell function and vascular remodeling, making the pathway relevant to cardiovascular development and responses to physiological and pathological stress. An Apelin Antibody can support studies examining apelin expression and distribution in these systems.

The apelin-APJ pathway also contributes to angiogenesis and blood vessel formation. Apelin signaling can regulate endothelial cell behavior and has been investigated in developmental vascular biology, tissue remodeling and cancer. Changes in apelin expression and signaling are therefore of interest in research examining tumor vascularization and cellular responses to hypoxic environments.

Beyond cardiovascular biology, apelin participates in metabolic and endocrine regulation. The pathway has been studied in glucose homeostasis, insulin sensitivity, adipose tissue function and energy metabolism. These activities connect apelin signaling with mechanisms coordinating metabolic, vascular and cardiovascular physiology.

NSJ Bioreagents offers Apelin Antibody reagents for investigating apelin expression and localization. An APEL Antibody can support research into APLN biology, apelin-APJ signaling, cardiovascular regulation, angiogenesis, vascular function and metabolic physiology.

Researchers studying apelin expression and APJ receptor signaling can explore our APLN Antibody page for additional reagents targeting the apelin peptide signaling pathway.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Apelin Antibody / APEL Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of Apelin (RKFRRQRPRLSHKGPMPF) was used as the immunogen for this Apelin antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the Apelin 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

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

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