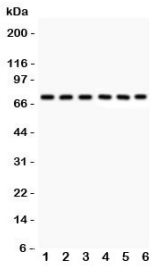
Kininogen Antibody / KNG1 Polyclonal Antibody (R31691)

Catalog No.	Formulation	Size
R31691	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
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
Gene ID	3827
Applications	Western blot: 0.5-1ug/ml
Limitations	This Kininogen Antibody / KNG1 Polyclonal Antibody is available for research use only.



Kininogen Antibody by WB in Human Cell Lines and Placenta. Western blot analysis of human cell lines and placenta lysate using Kininogen Antibody. Lane 1: U87; lane 2: MCF-7; lane 3: SKOV; lane 4: SW620; lane 5: COLO320; lane 6: human placenta. The datasheet reports an immunoreactive band at approximately 72 kDa, corresponding to its stated molecular weight for kininogen 1. KNG1 encodes high and low molecular weight kininogen, two circulating glycoproteins involved in coagulation and inflammatory signaling. KNG1 Polyclonal Antibody recognizes an N-terminal region shared by both isoforms, although the detected protein species has not been independently established.

Description

Kininogen Antibody recognizes kininogen 1 (KNG1), a circulating plasma glycoprotein involved in blood coagulation, inflammatory signaling, and vascular homeostasis. The KNG1 gene produces two major alternatively spliced proteins, high molecular weight kininogen (HMWK) and low molecular weight kininogen (LMWK). These isoforms share an extensive N-terminal region but differ in their C-terminal sequences and functional interactions. Kininogens are synthesized primarily by hepatocytes and secreted into the bloodstream, where they participate in proteolytic pathways that regulate vascular responses and inflammatory mediator production.

High molecular weight kininogen is an essential cofactor in the plasma contact activation system, supporting the

assembly of prekallikrein and coagulation factor XI on negatively charged surfaces. During contact activation, plasma kallikrein cleaves HMWK to release bradykinin, a nine-amino-acid peptide that promotes vasodilation, increases vascular permeability, and contributes to inflammatory responses. Low molecular weight kininogen can also serve as a precursor for kinin generation but lacks the specialized contact system binding regions found in HMWK. Both isoforms contain cystatin-like domains associated with protease regulation.

KNG1 is extensively studied in disorders involving abnormal kallikrein-kinin signaling, including hereditary angioedema, vascular inflammation, and thromboinflammatory conditions. Excessive bradykinin generation contributes to the episodic tissue swelling characteristic of certain forms of hereditary angioedema. Experimental studies have also investigated kininogen function in thrombosis, ischemia-reperfusion injury, and inflammatory responses involving endothelial cells. The relationship between contact activation and innate immunity has made KNG1 an important subject in research examining interactions between coagulation and inflammation.

Beyond vascular disorders, altered kininogen abundance and proteolytic fragments have been investigated as potential biomarkers in cancer and inflammatory disease. Because KNG1 is predominantly a secreted plasma protein, its presence in tissues may reflect circulating protein, local synthesis, or extracellular deposition. Glycosylation and proteolytic processing can influence the apparent molecular weight of detected kininogen species. NSJ Bioreagents offers a rabbit polyclonal antibody raised against recombinant human KNG1 amino acids 19-210, a region shared by the major kininogen isoforms and distinct from the mature bradykinin peptide. A Kininogen Antibody provides a useful tool for investigating KNG1 expression, protein processing, and the molecular pathways connecting coagulation, inflammation, and vascular biology.

For additional research into kininogen expression, bradykinin generation, and vascular inflammatory pathways, explore our KNG1 Antibody page.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Kininogen Antibody / KNG1 Polyclonal Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 19-210) was used as the immunogen for this Kininogen antibody.

Storage

After reconstitution, the Kininogen 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

Kininogen 1 antibody, KNG1 antibody, Plasma Kininogen antibody, High Molecular Weight Kininogen antibody, Low Molecular Weight Kininogen antibody, HMWK antibody, LMWK antibody, Bradykinin Precursor antibody

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