

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kininogen/Kininostatin in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Kininostatin Lys438-Ser531 Accession # P01042
Endotoxin Level	<0.20 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Kininogen High Molecular Weight (HKa) (Catalog # 1569-PI) Recombinant Human Kininostatin (Catalog # 1396-KN)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

High molecular weight kininogen (HK) is a secreted plasma glycoprotein consisting of six domains (D1 through D6). It binds specifically to endothelial cells and serves as a substrate of plasma kallikrein which releases bradykinin from within D4 of HK. Bradykinin is an active peptide that regulates multiple vascular processes. The resulting cleaved HK, called HKa, is a disulfide-linked dimer containing a heavy chain (D1 to D3) and a light chain (D5 and D6). HKa differs from HK in conformation and possesses new functional properties. It is a potent angiogenesis inhibitor that strongly inhibits endothelial cell proliferation and migration. HKa also induces apoptosis of endothelial cells. D5 of HKa has been shown to be the active region primarily responsible for the HKa anti-angiogenic activity and has been named kininostatin. While both HK and HKa are plasma proteins that are present in circulation, it is not known if kininostatin (D5) can be released from HKa and exist in plasma (1-4).

References:

1. Guo, Y. *et al.* (2002) *International Immunopharmacology* **2**:1931.
2. Zhang, J. *et al.* (2000) *FASEB* **14**:2589.
3. Colman, R.W. *et al.* (2000) *Blood* **95**(2): 543.
4. Guo, Y. *et al.* (2001) *Arterioscler. Thromb. Vasc. Biol.* **21**:1427.