**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human Kininogen/Kininostatin in direct ELISAs and Western blots.

**Source** Polyclonal Goat IgG

**Purification** Antigen Affinity-purified

**Immunogen**

- E. coli-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.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**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.

<table>
<thead>
<tr>
<th>Western Blot</th>
<th>Sample</th>
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<tbody>
<tr>
<td>0.1 µg/mL</td>
<td>Recombinant Human Kininogen High Molecular Weight (HKa) (Catalog # 1569-PI)</td>
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<tr>
<td></td>
<td>Recombinant Human Kininostatin (Catalog # 1396-KN)</td>
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</table>

**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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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:**