

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Kininogen in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Kininogen Gln19-Ser644 Accession # P01042
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Kininogen High Molecular Weight (HKa) (Catalog # 1569-PI)
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Kininogen High Molecular Weight (HKa) (Catalog # 1569-PI), <a href="#">see our available Western blot detection antibodies</a>

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Kininogen, also known as α2-thiol proteinase inhibitor, is a multi-function protein. There are two alternatively spliced forms, designated as the high molecular weight (HMW) and low MW (LMW) forms (1). The HMW form is synthesized as a 644 amino acid residue precursor with a signal peptide (residues 1-18). The mature chain (residues 19-644) is further processed into the heavy (residues 19-380) and the light (residues 390-644) chains. The active peptide bradykinin (residues 381-389) is released, which has a variety of functions including muscle contraction, hypotension and inflammation. The heavy chain consists of three cystatin-like domains, which are responsible for inhibiting cysteine proteases. The light chain consists of a His-rich domain, which is associated with the clotting activity. In comparison to the HMW form, the LMW Kininogen (427 residues) has the same sequence in its heavy chain and bradykinin, but a different sequence in its light chain (residues 402-427). The LMW form is not involved in blood clotting.

### References:

1. Takagaki, Y. *et al.* (1985) *J. Biol. Chem.* **260**:8601.