

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                                                                                                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Kininogen Heavy Chain in direct ELISAs and Western blots. It reacts with HK, Kininogen, and the heavy chain, but not with the light chain alone. In direct ELISAs, no cross-reactivity with recombinant human (rh) Cystatin A, B, C, D, |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 236012                                                                                                                                                                                                      |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human Kininogen<br>Gln19-Ser644 (Ile581Thr)<br>Accession # P01042                                                                                                                                     |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                   |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                                                                                                                                          |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                                                                                                                                                                       |

## 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>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Kininogen, also known as α<sub>2</sub>-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 (aa) precursor with a signal peptide (aa 1-18). The mature chain (aa 19-644) is further processed into the heavy (aa 19-380) and the light (aa 390-644) chains. The active peptide bradykinin (aa 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 aa) has the same sequence in its heavy chain and bradykinin, but a different sequence in its light chain (aa 402-427). The LMW form is not involved in blood clotting.

## PRODUCT SPECIFIC NOTICES

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