

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Kininogen in direct ELISAs and Western blots. In Western blots, reacts with the full length mouse Kininogen (aa 21-661), but not with the light chain alone. In Western blots, no cross-reactivity with recombinant human (rh) Cystatin D, F, SA, SN, recombinant mouse (rm) Cystatin A, B, C, E/M, rmCystatin/Stefin Homolog, rmFetuin A, rhFetuin B, rmHPRG, rhKininogen, or rhKininostatin is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 288422
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Kininogen Glu21-Ser661 Accession # O08677
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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse Kininogen High Molecular Weight (HKa) (Catalog # 2206-PI) under non-reducing conditions only
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Kininogen High Molecular Weight (HKa) (Catalog # 2206-PI), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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. <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

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 mouse HMW form is synthesized as a 661 amino acid (aa) precursor with a signal peptide (aa 1-20). The mature chain (aa 21-661) is further processed into the heavy (aa 21-379) and the light (aa 389-661) chains. The active peptide bradykinin (aa 380-388) 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 (432 residues) has the same sequence in its heavy chain and bradykinin but has a different sequence in its light chain (aa 401-432). The LMW form is not involved in blood clotting.

References:

1. Takano, M. *et al.* (1997) *Biochim. Biophys. Acta* **1352**:222.