

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse Plasma Kallikrein/KLKB1 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) Kallikrein/KLKB1, rhKallikrein 1, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14, 15, recombinant mouse HGFA, rhFactor                       |
| <b>Source</b>             | Monoclonal Rat IgG <sub>1</sub> Clone # 337801                                                                                                                                                                                                                              |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Kallikrein/KLKB1<br>Gly20-Ala638<br>Accession # NP_032481                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

Plasma kallikrein, a serine protease, is synthesized in the liver and circulates in the plasma by binding to high molecular weight (HMW) kininogen or as a free zymogen. Once activated by its physiological activator, factor XII, it displays endopeptidase activity towards peptide bonds after arginine (preferred) and lysine. It cleaves HMW kininogen, its major physiological substrate, to release the potent vasodilator peptide bradykinin. It is also able to cleave a number of inactive precursor proteins to generate active products, such as plasminogen and prourokinase. Thus, it plays an important role in blood pressure regulation, fibrinolysis, and neutrophil activation (1). Mouse plasma kallikrein precursor contains a signal peptide (aa 1-19) and a pro form sequence (aa 20-638). Upon activation, the pro form is converted to a heavy chain and a light chain, which is linked by disulfide bonds and the latter contains the catalytic domain (2).

#### PRODUCT SPECIFIC NOTICES

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