

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Kallikrein 1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) KLK-3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, rhHGFA, rhFactorVII, rhFactorXI,                                 |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 323803                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Kallikrein 1<br>Ile25-Ser262<br>Accession # NP_002248                                                                                                                                                                 |
| <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<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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <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

Kallikrein 1 (KLK1), also known as tissue kallikrein, is a member of human tissue kallikrein family (1). The best known physiological function of KLK1 is the cleavage of kininogen to release the vasoactive kinin peptide (bradykinin or lysyl-bradykinin), which regulates vasodilation, blood pressure reduction, smooth muscle relaxation and contraction, pain induction and inflammation (2). In addition, KLK1 may play a role in angiogenesis and tumorigenesis (2). Human KLK1 precursor contains a signal peptide (residues 1 to 18), a short pro peptide (residues 19 to 24) and a mature chain (residues 25 to 262). The purified rhKLK1 contains the mature chain and the propeptide from human KLK5. After being activated by thermolysin, rhKLK1 is active against a fluorogenic peptide substrate described above.

## PRODUCT SPECIFIC NOTICES

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