

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human KLK-B1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 736811
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human KLK-B1 Gly20-Ala638 Accession # P03952
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	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.

Immunohistochemistry 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

Human 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). Human Plasma Kallikrein precursor contains a signal peptide (residues 1 to 19) and a pro form sequence (residues 20 to 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). The human Plasma Kallikrein pro form was expressed in the NS0 cells with a foreign signal peptide. The purified enzyme is mainly the pro form. When activated by thermolysin, it displays activity against a fluorogenic peptide substrate as described in Activity Assay Protocol. This activity can be inhibited by Human Serpin G1/C1 Inhibitor (Catalog # 2488-PI).

PRODUCT SPECIFIC NOTICES

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