

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kallikrein 11 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 371604
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Kallikrein 11 Glu51-Asn282 Accession # Q9UBX7
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

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.

Neutralization Measured by its ability to neutralize Recombinant Human Kallikrein 11 (1 µg/mL, Catalog # [1595-SE](#)) cleavage of the fluorogenic peptide substrate VLK-SBzl (0.1 mM). The Neutralization Dose (ND₅₀) is typically 2.4 µg/mL.

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.
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

As a member of human tissue kallikrein family, Kallikrein 11, also known as hippostasin, trypsin-like serine protease and PRSS20, is encoded by the KLK11 gene (1). Two alternatively spliced forms exist, resulting in 250 (isoform 1) and 282 (isoform 2) amino acid sequences, respectively (2-5). Isoform 1 consists of a signal peptide (residues 1-18), a short pro peptide (residues 19-21) and the mature chain (residues 22-250). Isoform 2 is identical to isoform 1, except that a 32 amino acid segment is inserted in isoform 2 before residue 1 in isoform 1. Isoform 1 is predominantly expressed in brain whereas isoform 2 is preferentially expressed in prostate. KLK11 is a novel marker for ovarian and prostate cancer carcinomas (6-8). Recombinant human (rh) KLK11, after being activated by thermolysin, is active against a thioester substrate. This activity can be inhibited by AEBSF (R&D Systems, Catalog # EI001), dichloroisocoumarin, and aprotinin. rhKLK11 produced by R&D Systems corresponds to isoform 1.

References:

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3. Yousef, G.M. *et al.* (2000) *Genomics* **63**:88.
4. Mitsui, S. *et al.* (2000) *Biochem. Biophys. Res. Commun.* **272**:205.
5. Gan, L. *et al.* (2000) *Gene* **257**:119.
6. Diamandis, E.P. *et al.* (2002) *Cancer Res.* **62**:295.
7. Nakamura, T. *et al.* (2003) *Urology* **61**:1042.
8. Borgono, C.A. *et al.* (2003) *Int. J. Cancer* **106**:605.