

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kallikrein 11 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human (rh) Kallikrein 3 and less than 1% cross-reactivity with rhKallikrein 5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Kallikrein 11 Ile54-Asn282 Accession # Q9UBX7
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

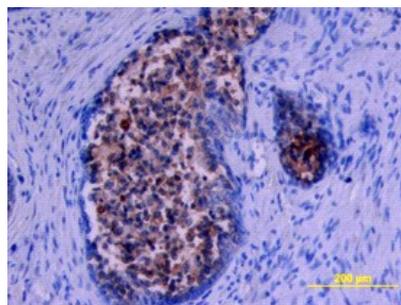
APPLICATIONS

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	0.1 µg/mL	Recombinant Human Kallikrein 11 (Catalog # 1595-SE)
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Kallikrein 11 (Catalog # 1595-SE), see our available Western blot detection antibodies

DATA

Immunohistochemistry



Kallikrein 11 in Human Prostate. Kallikrein 11 was detected in immersion fixed paraffin-embedded sections of human prostate using Goat Anti-Human Kallikrein 11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1595) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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 # E1001), dichloroisocoumarin, and aprotinin. rhKLK11 produced by R&D Systems corresponds to isoform 1.

References:

1. Yousef, G.M. and E.P. Diamandis (2001) *Endocrine Rev.* **22**:184.
2. Yoshida, S. *et al.* (1998) *Biochim. Biophys. Acta* **1399**:225.
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.