Human Kallikrein 13 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2625

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kallikrein 13 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human (rh) Kallikrein 8 and less than 5% cross-reactivity with rhKallikrein 11, rhKallikrein 14, and rhKallikrein 15 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Kallikrein 13 Val19-Ile262 Accession # Q9UKR3
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

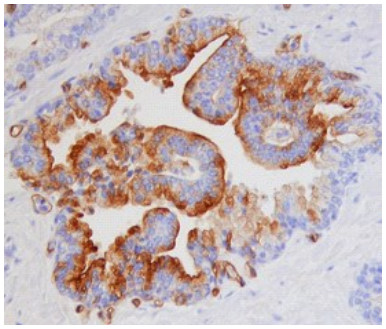
APPLICATIONS

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 13 (Catalog # 2625-SE)
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Kallikrein 13 (Catalog # 2625-SE), see our available Western blot detection antibodies
Neutralization	Measured by its ability to neutralize Recombinant Human Kallikrein 13 (1 µg/mL, Catalog # 2625-SE) cleavage of the fluorogenic peptide substrate Boc-VPR-AMC (100 µM, Catalog # ES011). The Neutralization Dose (ND_{50}) is typically 8.6 µg/mL.	

DATA

Immunohistochemistry



Kallikrein 13 in Human Prostate Cancer Tissue. Kallikrein 13 was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using 15 µg/mL Goat Anti-Human Kallikrein 13 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2625) overnight at 4 °C. Tissue was stained with 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956

Human Kallikrein 13 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2625

BACKGROUND

Human tissue Kallikrein 13 (hK13) is a member of the human tissue kallikrein family. The gene encoding for rhK13 is termed KLK13 and it resides on chromosome 19q13.3-4 along with fourteen other members of the family. KLK13 spans about 8.7 kb genomic DNA and the longest transcript is 831 bp, encoding for a protein of 277 amino acids (1). Another five shorter splice variants have also been identified. They are specifically expressed in the testicular tissue and encode for five truncated forms of hK13 (2). Due to the aspartic acid residue in the substrate binding pocket, the enzymatic activity of hK13 is predicted be trypsin-like. It has been shown that recombinant hK13 produced in yeast can cleave synthetic peptides after the arginine residue and some extracellular matrix components (3). However, its exact physiological substrates and functions remain obscure. Despite the lack of knowledge on the physiological function of hK13, several studies have demonstrated that hK13 is implicated with cancer of the breast and ovary and it can serve as a favorable prognostic biomarker for these malignancies (4, 5). The purified, secreted rhK13 is mainly the pro form. When activated by lysyl-endopeptidase, it displays enzymatic activity towards a fluorogenic synthetic peptide. This activity can be inhibited by rhSerpin A5, E1, and F2 (R&D Systems, Catalog # 1266-PI, 1786-PI, and 1470-PI).

References:

1. Yousef, G.M. *et al.* (2000) J. Biol. Chem. **275**:11891.
2. Chang, A. *et al.* (2001) Anticancer Res. **21**:3147.
3. Kapadia, C. *et al.* (2004) Biochem. Biophys. Res. Commun. **323**:1084.
4. Chang, A. *et al.* (2002) Br. J. Cancer. **86**:1457.
5. Scorilas, A. *et al.* (2004) J. Clin. Oncol. **22**:678.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 **Europe | Middle East | Africa** TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956