

KLK6 (H-60): sc-20624

BACKGROUND

Kallikreins (KLKs) belong to the serine protease family of proteolytic enzymes. Human pancreatic/renal KLK encodes for the KLK1 enzyme, which is involved in post-translational processing of polypeptide precursors. The function of the other members of KLK gene family is still currently unknown, but evidence suggests that many KLKs are implicated in carcinogenesis. The human KLK gene family consists of 15 serine proteases. The human KLK genes are clustered on chromosome 19q13.41. Unlike other kallikreins, the KLK4-15 encoded proteases are less related and do not contain a conventional KLK loop. Clusters of genes exhibit high prostatic (KLK2-4, KLK15) or pancreatic (KLK6-13) expression. KLK2 is also known as glandular kallikrein 2, tissue kallikrein, or HGK-1 and KLK3 is known as prostate-specific antigen (PSA). Both KLK2 and KLK3 have important applications in prostate cancer and breast cancer diagnostics. KLK4, KLK5, KLK9, KLK13, KLK12 and KLK14 have been previously known as KLK-L1, KLK-L2, KLK-L3, KLK-L4, KLK-L5 and KLK-L6, respectively. Many of the KLKs are regulated by steroid hormones and a few of them, specifically KLK3, 6 and 10 are known to be down regulated in breast and other cancers.

CHROMOSOMAL LOCATION

Genetic locus: KLK6 (human) mapping to 19q13.41.

SOURCE

KLK6 (H-60) is a rabbit polyclonal antibody raised against amino acids 111-170 of KLK6 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

KLK6 (H-60) is recommended for detection of KLK6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KLK6 (H-60) is also recommended for detection of KLK6 in additional species, including equine and canine.

Suitable for use as control antibody for KLK6 siRNA (h): sc-41532, KLK6 shRNA Plasmid (h): sc-41532-SH and KLK6 shRNA (h) Lentiviral Particles: sc-41532-V.

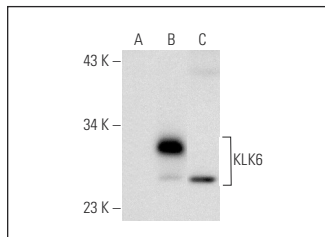
Molecular Weight of KLK6: 30 kDa.

Positive Controls: KLK6 (h): 293T Lysate: sc-173817 or MCF7 whole cell lysate: sc-2206.

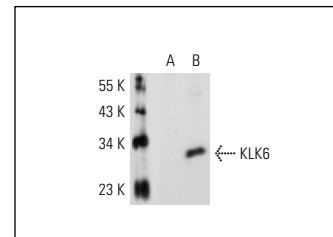
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



KLK6 (H-60): sc-20624. Western blot analysis of KLK6 expression in non-transfected 293T: sc-117752 (A), human KLK6 transfected 293T: sc-173817 (B) and MCF7 (C) whole cell lysates.



KLK6 (H-60): sc-20624. Western blot analysis of KLK6 expression in non-transfected: sc-110760 (A) and human KLK6 transfected: sc-112947 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Diehl, H.C., et al. 2007. A catalogue of proteins released by colorectal cancer cells *in vitro* as an alternative source for biomarker discovery. *Proteomics Clin. Appl.* 1: 47-61.
- Nathalie, H.V., et al. 2009. High kallikrein-related peptidase 6 in non-small cell lung cancer cells: an indicator of tumour proliferation and poor prognosis. *J. Cell. Mol. Med.* 13: 4014-4022.
- Chenau, J., et al. 2009. The cell line secretome, a suitable tool for investigating proteins released *in vivo* by tumors: application to the study of p53-modulated proteins secreted in lung cancer cells. *J. Proteome Res.* 8: 4579-4591.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **KLK6 (D-1): sc-374564**, our highly recommended monoclonal alternative to KLK6 (H-60).