

KLK6 (h3): 293T Lysate: sc-158665

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 19q13.3. 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.

REFERENCES

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3. Shimizu-Okabe, C., Yousef, G.M., Diamandis, E.P., Yoshida, S., Shiosaka, S. and Fahnstock, M. 2001. Expression of the kallikrein gene family in normal and Alzheimer's disease. *Neuroreport* 12: 2747-2751.
4. Yousef, G.M., Magklara, A., Chang, A., Jung, K., Katsaros, D. and Diamandis, E.P. 2001. Cloning of a new member of the human kallikrein gene family, KLK14, which is down regulated in different malignancies. *Cancer Res.* 61: 3425-3431.
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CHROMOSOMAL LOCATION

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

PRODUCT

KLK6 (h3): 293T Lysate represents a lysate of human KLK6 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

KLK6 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive KLK6 antibodies.

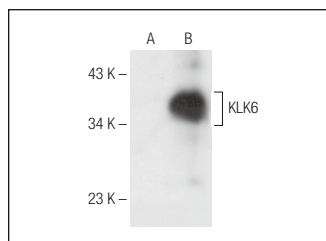
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

KLK6 (D-1): sc-374564 is recommended as a positive control antibody for Western Blot analysis of enhanced human KLK6 expression in KLK6 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



KLK6 (D-1): sc-374564. Western blot analysis of KLK6 expression in non-transfected: sc-117752 (A) and human KLK6 transfected: sc-158665 (B) 293T whole cell lysates.

PROTOCOLS

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