

KLK10 (2): sc-135961

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 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. 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, KLK6 and KLK10, are known to be downregulated in breast and other cancers.

REFERENCES

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3. 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: KLK10 (human) mapping to 19q13.41.

SOURCE

KLK10 (2) is a mouse monoclonal antibody raised against amino acids 99-202 of KLK10 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

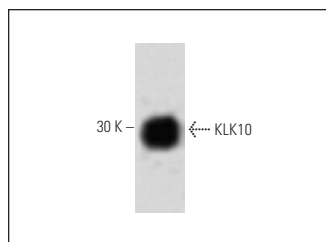
KLK10 (2) is recommended for detection of KLK10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for KLK10 siRNA (h): sc-41538, KLK10 shRNA Plasmid (h): sc-41538-SH and KLK10 shRNA (h) Lentiviral Particles: sc-41538-V.

Molecular Weight of KLK10: 30 kDa.

Positive Controls: NIH:OVCAR-3 cell lysate, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

DATA



KLK10 (2): sc-135961. Western blot analysis of KLK10 expression in NIH:OVCAR3 whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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