

XYLB (N-16): sc-99723

BACKGROUND

XYLB (xylulose kinase or xylulokinase) is a 536 amino acid protein that utilizes ATP to phosphorylate D-xylulose and may play a role in energy metabolism. The XYLB gene resides on chromosome 3, which contains about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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2. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
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4. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
5. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
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8. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
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CHROMOSOMAL LOCATION

Genetic locus: XYLB (human) mapping to 3p22.2; Xylb (mouse) mapping to 9 F3.

SOURCE

XYLB (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of XYLB of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99723 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

XYLB (N-16) is recommended for detection of XYLB of mouse, rat and 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).

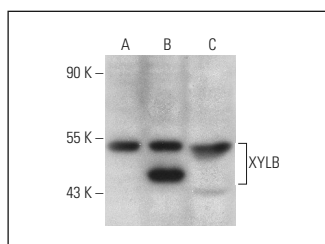
XYLB (N-16) is also recommended for detection of XYLB in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for XYLB siRNA (h): sc-78008, XYLB siRNA (m): sc-155398, XYLB shRNA Plasmid (h): sc-78008-SH, XYLB shRNA Plasmid (m): sc-155398-SH, XYLB shRNA (h) Lentiviral Particles: sc-78008-V and XYLB shRNA (m) Lentiviral Particles: sc-155398-V.

Molecular Weight of XYLB: 48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or XYLB (h): 293T Lysate: sc-116396.

DATA



XYLB (N-16): sc-99723. Western blot analysis of XYLB expression in non-transfected 293T: sc-117752 (A), human XYLB transfected 293T: sc-116396 (B) and HeLa (C) whole cell lysates.

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.