SANTA CRUZ BIOTECHNOLOGY, INC.

XylT-I (H-74): sc-134851

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Xylosyltransferase-I (XylT-I), also designated UDP-D-xylose:proteoglycan core protein β-D-xylosyltransferase 1, is a glycoprotein that catalyzes the transfer of UDP-xylose to serine residues within XT recognition sequences of target proteins. Addition of xylose to the core protein is a requirement for the biosynthesis of the glycosaminoglycan chains that are characteristic of proteoglycans. Xylosyltransferase proteins, which can be secreted, display activity in sternal cartilage chondrocytes, chondrosarcoma, nasal septum tumor and choriocarcinoma cells. XylT-I is widely expressed, with higher levels of expression detected in placenta, kidney and pancreas, and lower levels of expression observed in skeletal muscle. Xylosyltransferase-II (XylT-II), also designated UDP-D-xylose:proteoglycan core protein β-D-xylosyltransferase 2, is also widely expressed, with higher levels of expression detected in kidney and pancreas.

REFERENCES

1. Götting, C., et al. 2004. Analysis of the DXD motifs in human xylosyltransferase I required for enzyme activity. J. Biol. Chem. 279: 42566-42573.
2. Kuhn, J., et al. 2005. Xylosyltransferase I acceptor properties of fibroblast growth factor and its fragment βFGF (1-24). Biochem. Biophys. Res. Commun. 333: 156-166.

CHROMOSOMAL LOCATION

Genetic locus: XYLT1 (human) mapping to 16p12.3; Xylt1 (mouse) mapping to 7 F2.

SOURCE

XylT-I (H-74) is a rabbit polyclonal antibody raised against amino acids 871-944 mapping near the C-terminus of XylT-I 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.

APPLICATIONS

XylT-I (H-74) is recommended for detection of XylT-I 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).

XylT-I (H-74) is also recommended for detection of XylT-I in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for XylT-I siRNA (h): sc-61817, XylT-I siRNA (m): sc-61818, XylT-I shRNA Plasmid (h): sc-61817-SH, XylT-I shRNA Plasmid (m): sc-61818-SH, XylT-I shRNA (h) Lentiviral Particles: sc-61817-V and XylT-I shRNA (m) Lentiviral Particles: sc-61818-V.

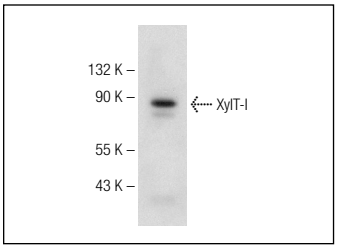
Molecular Weight (observed) of XylT-I: 72 kDa.

Positive Controls: JAR cell lysate: sc-2276 or MIA PaCa-2 cell lysate: sc-2285.

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



XylT-I (H-74): sc-134851. Western blot analysis of XylT-I expression in JAR whole cell lysate.

SELECT PRODUCT CITATIONS

1. Lacerda, C.M., et al. 2012. Static and cyclic tensile strain induce myxomatous effector proteins and serotonin in canine mitral valves. J. Vet. Cardiol. 14: 223-230.

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.

PROTOCOLS

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