

EXTL2 (C-20): sc-46952

BACKGROUND

EXTL2 is an α 1,4-N-acetylhexosaminyltransferase that catalyzes the transfer reaction of N-acetylglucosamine and N-acetylgalactosamine from the respective UDP-sugars to the non-reducing end of [glucuronic acid] β 1-3 [galactose] β 1-O-naphthalenemethanol, an acceptor substrate analog of the natural common linker of various glycosylaminoglycans. Also designated exostosin-like protein 2, EXTL2 has been purified from the serum-free culture of a human sarcoma cell line and is a member of the hereditary multiple exostoses (EXT) gene family of tumor suppressors.

REFERENCES

1. Kitagawa, H., Shimakawa, H. and Sugahara, K. 1999. The tumor suppressor EXT-like gene EXTL2 encodes an α 1,4-N-acetylhexosaminyltransferase that transfers N-acetylgalactosamine and N-acetylglucosamine to the common glycosaminoglycan-protein linkage region. The key enzyme for the chain initiation of heparan sulfate. *J. Biol. Chem.* 274: 13933-13937.
2. Pedersen, L.C., Dong, J., Taniguchi, F., Kitagawa, H., Krahn, J.M., Pedersen, L.G., Sugahara, K. and Negishi, M. 2003. Crystal structure of an α 1,4-N-acetylhexosaminyltransferase (EXTL2), a member of the exostosin gene family involved in heparan sulfate biosynthesis. *J. Biol. Chem.* 278: 14420-14428.
3. Sobhany, M., Dong, J. and Negishi, M. 2005. Two-step mechanism that determines the donor binding specificity of human UDP-N-acetylhexosaminyltransferase. *J. Biol. Chem.* 280: 23441-23445.

CHROMOSOMAL LOCATION

Genetic locus: EXTL2 (human) mapping to 1p21.2; Extl2 (mouse) mapping to 3 G1.

SOURCE

EXTL2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EXTL2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-46952 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

EXTL2 (C-20) is recommended for detection of EXTL2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EXTL2 (C-20) is also recommended for detection of EXTL2 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for EXTL2 siRNA (h): sc-60611, EXTL2 siRNA (m): sc-60612, EXTL2 shRNA Plasmid (h): sc-60611-SH, EXTL2 shRNA Plasmid (m): sc-60612-SH, EXTL2 shRNA (h) Lentiviral Particles: sc-60611-V and EXTL2 shRNA (m) Lentiviral Particles: sc-60612-V.

Molecular Weight of EXTL2: 30 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.