

EXT2 (C-17): sc-11045

BACKGROUND

Hereditary multiple exostoses (HME) is an autosomal dominant disorder characterized by the formation of exostoses (EXT), which are cartilage-capped bony protuberances mainly located on long bones. Two proteins associated with EXT, EXT1 and EXT2, form homo/heteromeric complexes *in vivo*, which leads to the accumulation of both proteins in the Golgi apparatus. EXT1 and EXT2 are endoplasmic reticulum-localized type II transmembrane glycoproteins that possess, or are tightly associated with, glycosyltransferase activities involved in the polymerization of the glycosaminoglycan, heparan sulfate (HS). EXT2 is a protein that harbors the D-glucuronyl (GlcA) and N-acetyl-D-glucosaminyl (GlcNAc) transferase activities required for biosynthesis of HS. EXT1 rescues defective HS biosynthesis and elevates low GlcA and GlcNAc transferase levels in mutated cells.

CHROMOSOMAL LOCATION

Genetic locus: EXT2 (human) mapping to 11p11.2; Ext2 (mouse) mapping to 2 E1.

SOURCE

EXT2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EXT2 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.

Blocking peptide available for competition studies, sc-11045 P, (100 µg 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.

APPLICATIONS

EXT2 (N-15) is recommended for detection of EXT2 of mouse, rat 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).

EXT2 (C-17) is also recommended for detection of EXT2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EXT2 siRNA (h): sc-106830, EXT2 siRNA (m): sc-144985, EXT2 shRNA Plasmid (h): sc-106830-SH, EXT2 shRNA Plasmid (m): sc-144985-SH, EXT2 shRNA (h) Lentiviral Particles: sc-106830-V and EXT2 shRNA (m) Lentiviral Particles: sc-144985-V.

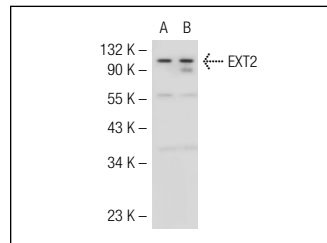
Molecular Weight of EXT2: 90 kDa.

Positive Controls: EXT2 (m): 293T Lysate: sc-126818.

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.

DATA



EXT2 (C-17): sc-11045. Western blot analysis of EXT2 expression in non-transfected: sc-117752 (A) and mouse EXT2 transfected: sc-126818 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Gesteira, T.F., Coulson-Thomas, V.J., Ogata, F.T., Farias, E.H., Cavalheiro, R.P., de Lima, M.A., Cunha, G.L., Nakayasu, E.S., Almeida, I.C., Toma, L. and Nader, H.B. 2011. A novel approach for the characterisation of proteoglycans and biosynthetic enzymes in a snail model. *Biochim. Biophys. Acta* 1814: 1862-1869.

PROTOCOLS

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

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Try **EXT2 (A-2): sc-514092**, our highly recommended monoclonal alternative to EXT2 (C-17).