SANTA CRUZ BIOTECHNOLOGY, INC.

Arylsulfatase E (L-13): sc-131421

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sulfatases hydrolyze sulfate esters from sulfated steroids, carbohydrates, proteoglycans and glycolipids. They are involved in hormone biosynthesis, modulation of cell signaling and degradation of macromolecules. Arylsulfatase E, also known as CDPX, CDPX1 or CDPXR, is a 589 amino acid Golgi apparatus protein expressed in the pancreas, liver and kidney. Belonging to the sulfatase family, Arylsulfatase E may be essential for the correct composition of cartilage and bone matrix during development. Inhibited by warfarin, Arylsulfatase E activity occurs under optimal pH and temperature. Defects in the gene encoding Arylsulfatase E are the cause of chondrodysplasia punctata X-linked recessive type 1 (CDPX1), which is characterized by aberrant bone mineralization, severe underdevelopment of nasal cartilage and distal phalangeal hypoplasia. Arylsulfatase E has no activity toward steroid sulfates.

REFERENCES

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4. Seidel, J., et al. 2001. Brachytelephalangic dwarfism due to the loss of ARSE and SHOX genes resulting from an X;Y translocation. Clin. Genet. 59: 115-121.
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7. Chocholska, S., et al. 2006. Molecular cytogenetic analysis of a familial interstitial deletion Xp22.2-22.3 with a highly variable phenotype in female carriers. Am. J. Med. Genet. A 140: 604-610.
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CHROMOSOMAL LOCATION

Genetic locus: Arse (rat) mapping to 2q25.

SOURCE

Arylsulfatase E (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Arylsulfatase E of rat 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-131421 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Arylsulfatase E (L-13) is recommended for detection of Arylsulfatase E of rat 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); non cross-reactive with other Arylsulfatase family members.

Molecular Weight of Arylsulfatase E: 66 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.

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.