**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**


**CHROMOSOMAL LOCATION**

Genetic locus: ARSE (human) mapping to Xp22.33.

**SOURCE**

Arylsulfatase E (F-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 513-534 near the C-terminus of Arylsulfatase E of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-393224 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

Arylsulfatase E (F-4) is recommended for detection of Arylsulfatase E of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Arylsulfatase E siRNA (hi): sc-91236, Arylsulfatase E shRNA Plasmid (hi): sc-91236-SH and Arylsulfatase E shRNA (hi) Lentiviral Particles: sc-91236-V.

Molecular Weight of Arylsulfatase E: 66 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FTC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Arylsulfatase E (F-4): sc-393224. Western blot analysis of Arylsulfatase E expression in 293T (A) and HeLa (B) whole cell lysates.

**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 for detailed protocols and support products.