

SEDL (G-17): sc-54406

BACKGROUND

SEDL (sedlin), also known as TRAPPC2 (trafficking protein particle complex subunit 2), SEDT, TRS20, MIP-2A (MBP-1-interacting protein 2A) or ZNF547L, is an evolutionarily conserved member of the sedlin subfamily of the TRAPP small subunits family of proteins. Localizing to the perinuclear region of the cytoplasm, SEDL binds to α enolase and, by sequestering it in the cytoplasm, inhibits α enolase transcriptional repression and α enolase-mediated cell death. In addition, SEDL is believed to be involved in transport from the endoplasmic reticulum (ER) to the Golgi, functioning as a component of the multi-subunit transport protein particle (TRAPP) complex. Mutations in the gene encoding SEDL can result in the late childhood onset of spondyloepiphyseal dysplasia tarda (SEDT), an X-linked recessive disease of endochondral bone formation affecting men. SEDT patients exhibit a short trunk and hips with degenerative disease.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300202. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Géczy, J., et al. 2003. Human wild-type SEDL protein functionally complements yeast Trs20p but some naturally occurring SEDL mutants do not. *Gene* 320: 137-144.
3. Shaw, M.A., et al. 2003. Identification of three novel SEDL mutations, including mutation in the rare, non-canonical splice site of exon 4. *Clin. Genet.* 64: 235-242.
4. Savarirayan, R., et al. 2003. Spondyloepiphyseal dysplasia tarda (SEDL, MIM #313400). *Eur. J. Hum. Genet.* 11: 639-642.
5. Fan, L., et al. 2003. Interaction of sedlin with chloride intracellular channel proteins. *FEBS Lett.* 540: 77-80.
6. Wang, H.L., et al. 2003. Gene diagnosis of X-linked spondyloepiphyseal dysplasia tarda by linkage analysis and DNA sequencing. *Zhonghua Er Ke Za Zhi* 41: 256-259.
7. Bar-Yosef, U., et al. 2004. X-linked spondyloepiphyseal dysplasia tarda: a novel SEDL mutation in a Jewish Ashkenazi family and clinical intervention considerations. *Am. J. Med. Genet. A* 125: 45-48.

CHROMOSOMAL LOCATION

Genetic locus: TRAPPC2 (human) mapping to Xp22.2; Trappc2 (mouse) mapping to X F5.

SOURCE

SEDL (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SEDL 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-54406 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SEDL (G-17) is recommended for detection of SEDL 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).

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

Suitable for use as control antibody for SEDL siRNA (h): sc-62984, SEDL shRNA Plasmid (h): sc-62984-SH and SEDL shRNA (h) Lentiviral Particles: sc-62984-V.

Molecular Weight of SEDL: 16 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.


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Guaranteed

Try **SEDL (JK-4): sc-101312**, our highly recommended monoclonal alternative to SEDL (G-17).