

ANGEL2 (I-21): sc-130580

BACKGROUND

ANGEL2 (protein angel homolog 2) is a 544 amino acid protein that belongs to the CCR4/nocturin family and exists as 2 alternatively spliced isoforms. The CCR4 family of proteins are 3'-5'-deadenyases that function in the first step of the degradation of poly(A) mRNA. The CCR4 family most likely displays both RNA and ssDNA substrate preferences, thereby implicating a potential role in many regulatory processes. The ANGEL2 gene maps to human chromosome 1 (1q32.3), which is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. Chromosome 1 contains about 3,000 genes, and considering the great number of genes there are also a large number of diseases associated with it. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons disease, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

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3. Ekelund, J., et al. 2001. Chromosome 1 loci in Finnish schizophrenia families. *Hum. Mol. Genet.* 10: 1611-1617.
4. Chen, J., et al. 2002. CCR4, a 3'-5' poly(A) RNA and ssDNA exonuclease, is the catalytic component of the cytoplasmic deadenylase. *EMBO J.* 21: 1414-1426.
5. Viswanathan, P., et al. 2003. Identification of multiple RNA features that influence CCR4 deadenylation activity. *J. Biol. Chem.* 278: 14949-14955.
6. Nimmo, G., et al. 2010. Rhizomelic chondrodysplasia punctata type 2 resulting from paternal isodisomy of chromosome 1. *Am. J. Med. Genet. A* 152A: 1812-1817.
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CHROMOSOMAL LOCATION

Genetic locus: ANGEL2 (human) mapping to 1q32.3.

SOURCE

ANGEL2 (I-21) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ANGEL2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ANGEL2 (I-21) is recommended for detection of ANGEL2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ANGEL2 siRNA (h): sc-88811, ANGEL2 shRNA Plasmid (h): sc-88811-SH and ANGEL2 shRNA (h) Lentiviral Particles: sc-88811-V.

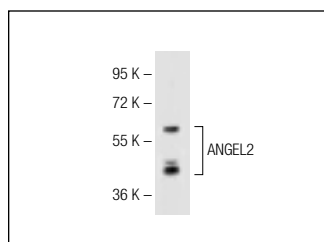
Molecular Weight of ANGEL2: 62 kDa.

Positive Controls: CEM whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ANGEL2 (I-21): sc-130580. Western blot analysis of ANGEL2 expression in CEM whole cell lysate.

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.