

FSTL4 (E-15): sc-164440

BACKGROUND

FSTL4 (follistatin-like protein 4), also known as KIAA1061, is an 842 amino acid secreted protein that contains one EF-hand domain, 2 Ig-like (immunoglobulin-like) domains and a kazal-like domain. Existing as three alternatively spliced isoforms, the gene encoding FSTL4 maps to human chromosome 5q31.1 and murin chromosome 11 B1.3. Chromosome 5 makes up approximately 6% of the human genome and contains 181 million base pairs, which encodes over 1,000 genes. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene, and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is caused by insertions or deletions within the TCOF1 gene located on chromosome 5. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. *Genomics* 16: 726-732.
- Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the heidelberg polyposis register. *Int. J. Colorectal Dis.* 16: 63-75.
- Schmutz, J., et al. 2004. The DNA sequence and comparative analysis of human chromosome 5. *Nature* 431: 268-274.
- Marklund, L., et al. 2006. Adult-onset autosomal dominant leukodystrophy with autonomic symptoms restricted to 1.5 Mbp on chromosome 5q23. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 141B: 608-614.
- Makrantonaki, E. and Zouboulis, C.C. 2007. Molecular mechanisms of skin aging: state of the art. *Ann. N.Y. Acad. Sci.* 1119: 40-50.

CHROMOSOMAL LOCATION

Genetic locus: FSTL4 (human) mapping to 5q31.1; Fstl4 (mouse) mapping to 11 B1.3.

SOURCE

FSTL4 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FSTL4 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-164440 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.

APPLICATIONS

FSTL4 (E-15) is recommended for detection of FSTL4 of mouse, rat and 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)], 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 FSTL5.

FSTL4 (E-15) is also recommended for detection of FSTL4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FSTL4 siRNA (h): sc-92009, FSTL4 siRNA (m): sc-145259, FSTL4 shRNA Plasmid (h): sc-92009-SH, FSTL4 shRNA Plasmid (m): sc-145259-SH, FSTL4 shRNA (h) Lentiviral Particles: sc-92009-V and FSTL4 shRNA (m) Lentiviral Particles: sc-145259-V.

Molecular Weight of FSTL4 isoform 1: 93 kDa.

Molecular Weight of FSTL4 isoform 2: 74 kDa.

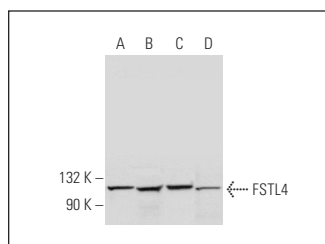
Molecular Weight of FSTL4 isoform 3: 67 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, U-251-MG whole cell lysate: sc-364176 or BC₃H1 cell lysate: sc-2299.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



FSTL4 (E-15): sc-164440. Western blot analysis of FSTL4 expression in Neuro-2A (A), U-251-MG (B) and BC₃H1 (C) whole cell lysates and rat brain tissue extract (D).

RESEARCH USE

For research use only, not for use in diagnostic procedures.