

SUSD5 (E-16): sc-99649

BACKGROUND

The sushi domain, which is comprised of approximately 60 amino acids and four cysteines, is present in a variety of proteins where it facilitates protein-protein interactions throughout the cell. SUSD5 (sushi domain containing 5), also known as KIAA0527, is a 629 amino acid single-pass type I membrane protein containing one link domain and one sushi (CCP/SCR) domain. The gene encoding SUSD5 maps to human chromosome three which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth Disease are a few of the numerous genetic diseases associated with chromosome three.

REFERENCES

1. De Jonghe, P., et al. 1997. Mutating neuropathic ulcerations in a chromosome 3q13-q22 linked Charcot-Marie-Tooth disease type 2B family. *J. Neurol. Neurosurg. Psychiatr.* 62: 570-573.
2. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
3. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
4. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
5. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.

CHROMOSOMAL LOCATION

Genetic locus: SUSD5 (human) mapping to 3p22.3; Susd5 (mouse) mapping to 9 F3.

SOURCE

SUSD5 (E-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of SUSD5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-99649 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

SUSD5 (E-16) is recommended for detection of SUSD5 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); non cross-reactive with other SUSD family members.

SUSD5 (E-16) is also recommended for detection of SUSD5 in additional species, including equine and bovine.

Suitable for use as control antibody for SUSD5 siRNA (h): sc-78019, SUSD5 siRNA (m): sc-153940, SUSD5 shRNA Plasmid (h): sc-78019-SH, SUSD5 shRNA Plasmid (m): sc-153940-SH, SUSD5 shRNA (h) Lentiviral Particles: sc-78019-V and SUSD5 shRNA (m) Lentiviral Particles: sc-153940-V.

Molecular Weight of SUSD5: 68 kDa.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.