TRAFD1 (E-18): sc-66674



The Power to Question

BACKGROUND

TRAFD1 (TRAF-type zinc finger domain containing 1), also known as FLN29, is a novel 582 amino acid protein that acts as a lipopolysaccharide (LPS)-and interferon (IFN)-inducible negative regulator, and may also play a role in endotoxin tolerance. TRAFD1 also interacts with TRAF6 to negatively regulate toll-like receptor (TLR) signaling. TRAFD1 contains one TRAF-type zinc finger and contains multiple phosphoserine and phosphothreonine residues. The gene encoding TRAFD1 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

- 1. Cao, Z., et al. 1996. TRAF6 is a signal transducer for interleukin-1. Nature 383: 443-446.
- 2. Delgado Carrasco, J., et al. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. Case report. An. Esp. Pediatr. 55: 553-557.
- Yokoyama, T., et al. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. Am. J. Ophthalmol. 136: 1186-1188.
- Mashima, R., et al. 2005. FLN29, a novel interferon- and LPS-inducible gene acting as a negative regulator of toll-like receptor signaling. J. Biol. Chem. 280: 41289-41297.
- 5. Nousiainen, M., et al. 2006. Phosphoproteome analysis of the human mitotic spindle. Proc. Natl. Acad. Sci. USA 103: 5391-5396.
- Sauve, S., et al. 2008. NMR assignment of the N-terminal TRAF-like RING zinc finger domain of human FLN29. Biomol NMR Assign 2: 33-36.
- 7. Sanada, T., et al. 2008. FLN29 deficiency reveals its negative regulatory role in the Toll-like receptor (TLR) and retinoic acid-inducible gene I (RIG-I)-like helicase signaling pathway. J. Biol. Chem. 283: 33858-33864.
- 8. Benussi, D.G., et al. 2009. Trisomy 12p and monosomy 4p: phenotypegenotype correlation. Genet. Test. Mol. Biomarkers 13: 199-204.

CHROMOSOMAL LOCATION

Genetic locus: TRAFD1 (human) mapping to 12q24.13; Trafd1 (mouse) mapping to 5 $\rm F$.

SOURCE

TRAFD1 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRAFD1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66674 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRAFD1 (E-18) is recommended for detection of TRAFD1 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).

TRAFD1 (E-18) is also recommended for detection of TRAFD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRAFD1 siRNA (h): sc-63145, TRAFD1 siRNA (m): sc-63146, TRAFD1 shRNA Plasmid (h): sc-63145-SH, TRAFD1 shRNA Plasmid (m): sc-63146-SH, TRAFD1 shRNA (h) Lentiviral Particles: sc-63145-V and TRAFD1 shRNA (m) Lentiviral Particles: sc-63146-V.

Molecular Weight of TRAFD1: 65 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) 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**