

TLE6 (D-4): sc-515065

BACKGROUND

The Notch signaling pathway controls various cellular interactions that are important for the specification of a variety of fates in both vertebrates and invertebrates. Key players in the Notch pathway are the TLE genes (for transducin-like enhancer of split, also designated ESG for enhancer of split groucho), which are human homologs of the *Drosophila* groucho gene. TLE6 (transducin-like enhancer of split 6), also known as GRG6, is a 449 amino acid cytoplasmic protein belonging to the WD repeat groucho/TLE family. As a member of the subcortical maternal complex (SCMC), TLE6 is essential for zygotes to progress beyond the first embryonic cell divisions. TLE6 contains seven WD repeats, a motif known to mediate protein-protein interactions. The WD40 repeat family of proteins is suggested to be involved in signal transduction, RNA processing, gene regulation, vesicular trafficking, cytoskeletal assembly and may play a role in the control of cytotypic differentiation.

REFERENCES

1. Wang, J.C., et al. 2000. Transducin-like enhancer of split proteins, the human homologs of *Drosophila* groucho, interact with hepatic nuclear factor 3 β . *J. Biol. Chem.* 275: 18418-18423.
2. Tetsuka, T., et al. 2000. Inhibition of nuclear factor- κ B-mediated transcription by association with the amino-terminal enhancer of split, a Groucho-related protein lacking WD40 repeats. *J. Biol. Chem.* 275: 4383-4390.
3. Yochum, G.S., et al. 2001. Pf1, a novel PHD zinc finger protein that links the TLE corepressor to the mSin3A-histone deacetylase complex. *Mol. Cell. Biol.* 21: 4110-4118.

CHROMOSOMAL LOCATION

Genetic locus: TLE6 (human) mapping to 19p13.3; Tle6 (mouse) mapping to 10 C1.

SOURCE

TLE6 (D-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 58-77 near the N-terminus of TLE6 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG₁ lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TLE6 (D-4) is available conjugated to agarose (sc-515065 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515065 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515065 PE), fluorescein (sc-515065 FITC), Alexa Fluor® 488 (sc-515065 AF488), Alexa Fluor® 546 (sc-515065 AF546), Alexa Fluor® 594 (sc-515065 AF594) or Alexa Fluor® 647 (sc-515065 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515065 AF680) or Alexa Fluor® 790 (sc-515065 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515065 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

TLE6 (D-4) is recommended for detection of TLE6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for TLE6 siRNA (h): sc-97764, TLE6 siRNA (m): sc-154292, TLE6 shRNA Plasmid (h): sc-97764-SH, TLE6 shRNA Plasmid (m): sc-154292-SH, TLE6 shRNA (h) Lentiviral Particles: sc-97764-V and TLE6 shRNA (m) Lentiviral Particles: sc-154292-V.

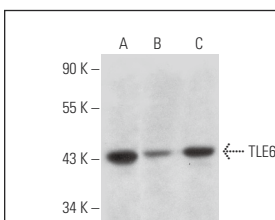
Molecular Weight of TLE6: 50 kDa.

Positive Controls: F9 cell lysate: sc-2245, Jurkat whole cell lysate: sc-2204 or c4 whole cell lysate: sc-364186.

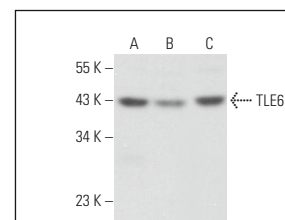
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG λ BP-HRP: sc-516132 or m-IgG λ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG λ BP-FITC: sc-516185 or m-IgG λ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TLE6 (D-4): sc-515065. Western blot analysis of TLE6 expression in F9 (A), c4 (B) and Jurkat (C) whole cell lysates.



TLE6 (D-4): sc-515065. Western blot analysis of TLE6 expression in F9 (A), Jurkat (B) and MOLT-4 (C) whole cell lysates. Detection reagent used: m-IgG λ BP-HRP (Cruz Marker): sc-516132-CM.

SELECT PRODUCT CITATIONS

1. Zhang, M., et al. 2021. Identification of novel biallelic TLE6 variants in female infertility with preimplantation embryonic lethality. *Front. Genet.* 12: 666136.

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.