

TLE5 (C-7): sc-515756



The Power to Question

BACKGROUND

The Notch signaling pathway controls cellular interactions 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. TLE5, also known as AES (amino-terminal enhancer of split), GRG or ESP1, is a 197 amino acid nuclear protein that belongs to the TLE family. Expressed predominately in fetal brain, liver, lung, heart and kidney and in adult muscle, TLE5 functions as either a homooligomer or a heterooligomer with other TLE family members and, through this association, dominantly represses the expression of TLE genes. In addition, TLE5 can repress NF κ B-regulated gene expression and is thought to play an important role in initiating and maintaining cell differentiation events. Two isoforms of TLE5 exist due to alternative splicing events.

REFERENCES

- Miyasaka, H., et al. 1993. Molecular cloning and expression of mouse and human cDNA encoding AES and ESG proteins with strong similarity to *Drosophila* enhancer of split groucho protein. *Eur. J. Biochem.* 216: 343-352.
- Hou, E.W., et al. 1998. Genomic organization and chromosome localization to band 19p13.3 of the human AES gene: gene product exhibits strong similarity to the N-terminal domain of *Drosophila* enhancer of split groucho protein. *DNA Cell Biol.* 17: 911-913.
- 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.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

TLE5 (C-7) is a mouse monoclonal antibody raised against amino acids 127-197 mapping at the C-terminus of TLE5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TLE5 (C-7) is available conjugated to agarose (sc-515756 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515756 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515756 PE), fluorescein (sc-515756 FITC), Alexa Fluor[®] 488 (sc-515756 AF488), Alexa Fluor[®] 546 (sc-515756 AF546), Alexa Fluor[®] 594 (sc-515756 AF594) or Alexa Fluor[®] 647 (sc-515756 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515756 AF680) or Alexa Fluor[®] 790 (sc-515756 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TLE5 (C-7) is recommended for detection of TLE5 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 TLE5 siRNA (h): sc-63133, TLE5 siRNA (m): sc-63134, TLE5 shRNA Plasmid (h): sc-63133-SH, TLE5 shRNA Plasmid (m): sc-63134-SH, TLE5 shRNA (h) Lentiviral Particles: sc-63133-V and TLE5 shRNA (m) Lentiviral Particles: sc-63134-V.

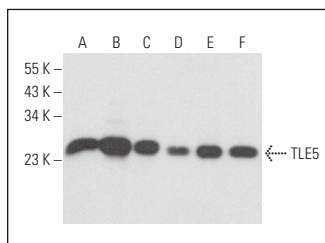
Molecular Weight of TLE5: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or human heart extract: sc-363763.

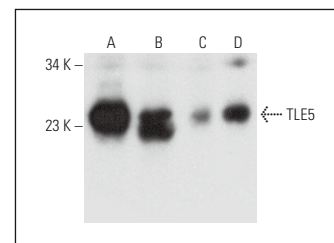
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-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 κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



TLE5 (C-7): sc-515756. Western blot analysis of TLE5 expression in HeLa (A), SUP-T1 (B), JAR (C), NIH/3T3 (D), C2C12 (E) and TK-1 (F) whole cell lysates.



TLE5 (C-7): sc-515756. Western blot analysis of TLE5 expression in HeLa (A) and Jurkat (B) whole cell lysates and human heart (C) and human placenta (D) tissue extracts.

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.

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