**BACKGROUND**

The Notch signaling pathway controls cellular interactions important for the specification of a variety of fates in both invertebrates and vertebrates. 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. Groucho is a transcriptional repressor that plays a key role in neurogenesis, segmentation and sex determination. TLEs associate with chromatin in live cells and specifically with histone H3, but not with other core histones. Expression of the TLE genes, TLE1, TLE2, TLE3 and TLE4, correlate with immature epithelial cells that are progressing toward a terminally differentiated state, suggesting a role during epithelial differentiation. TLE1, TLE2 and TLE3 have elevated expression in cervical squamous metaplasias and carcinomas, while TLE4 is most highly expressed in the brain, particularly in the caudate nucleus. TLE1 and TLE4 contain SP and WD40 domains, through which TLE1 binds AML1 to inhibit AML1-induced transactivation of the CSF1 receptor. In early stages of cell differentiation, TLE1 is upregulated, and TLE2 and TLE4 are downregulated. In later stages, TLE2 and TLE4 are upregulated, and expression of TLE1 decreases.

**APPLICATIONS**

TLE2 (D-10) is recommended for detection of TLE2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TLE2 siRNA (h): sc-38560, TLE2 siRNA (m): sc-38561, TLE2 shRNA Plasmid (h): sc-38560-SH, TLE2 shRNA Plasmid (m): sc-38561-SH, TLE2 shRNA (h) Lentiviral Particles: sc-38560-V and TLE2 shRNA (m) Lentiviral Particles: sc-38561-V.

TLE2 (D-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of TLE2: 80 kDa.

Molecular Weight (observed) of TLE2: 92 kDa.

Positive Controls: RPMI2650 whole cell lysate: sc-364192, AN3CA whole cell lysate: sc-24662 or T-47D cell lysate: sc-2293.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TLE2 (human) mapping to 19p13.3; Tle2 (mouse) mapping to 10 C1.

**SOURCE**

TLE2 (D-10) is a mouse monoclonal antibody raised against amino acids 230-420 of TLE2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374226 X, 200 µg/0.1 ml.

**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.