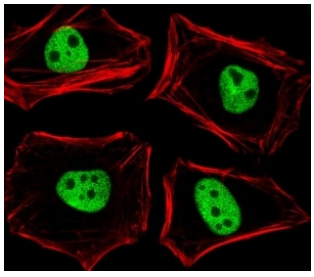
TLE1 Antibody for IF / Transducin-Like Enhancer Protein 1 Immunofluorescence Antibody (F52972)

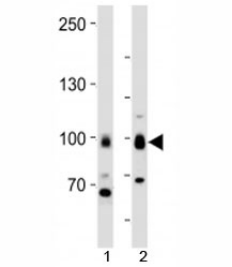
Catalog No.	Formulation	Size
F52972-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F52972-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q04724
Applications	Immunofluorescence: 1:25 Western blot: 1:1000
Limitations	This TLE1 antibody is available for research use only.



TLE1 Antibody for IF / Transducin-Like Enhancer Protein 1 Immunofluorescence Antibody immunofluorescence analysis of human HeLa cells. Human HeLa cells stained with TLE1 Antibody for IF / Transducin-Like Enhancer Protein 1 Immunofluorescence Antibody demonstrate strong nuclear fluorescence signal consistent with the nuclear localization of the TLE1 transcriptional corepressor. The rabbit polyclonal antibody was used at a 1:25 dilution and detected using an Alexa Fluor 488-conjugated goat anti-rabbit IgG secondary antibody producing green fluorescence. Cytoplasmic actin filaments were counterstained with Alexa Fluor 555 conjugated phalloidin (red), highlighting the cytoskeletal structure and providing cellular context for nuclear TLE1 staining. The nuclei show bright green nuclear signal relative to the surrounding actin cytoskeleton, illustrating the characteristic nuclear localization pattern of Transducin-Like Enhancer Protein 1 in immunofluorescence microscopy.



Western blot analysis of lysate from 1) MCF-7 cells and 2) human brain tissue using TLE1 antibody at 1:1000.

Description

Transducin-Like Enhancer Protein 1 (TLE1) is a nuclear transcriptional corepressor encoded by the TLE1 gene and a member of the Groucho/TLE family of transcriptional regulatory proteins. TLE1 Antibody for IF enables immunofluorescence visualization of Transducin-Like Enhancer Protein 1 within the cell nucleus, allowing researchers to study nuclear localization, transcriptional repression complexes, and chromatin-associated regulatory signaling using fluorescence microscopy. TLE1 immunofluorescence antibody staining typically produces strong nuclear fluorescence patterns that correspond to the protein's role in transcriptional regulation and interaction with DNA-binding transcription factors involved in developmental and signaling pathways.

TLE1 Antibody for IF is particularly useful for immunofluorescence microscopy and confocal fluorescence imaging where the nuclear distribution of Transducin-Like Enhancer Protein 1 can be visualized relative to cellular structures. In typical IF experiments, cells are fixed, permeabilized, and incubated with the TLE1 antibody followed by detection with fluorescently labeled secondary antibodies. When combined with nuclear counterstains such as DAPI, TLE1 immunofluorescence staining reveals a predominantly nuclear signal that highlights the localization of transcriptional corepressor complexes within the chromatin environment. This type of fluorescence imaging enables researchers to examine how TLE1 participates in transcriptional repression and regulatory protein networks directly inside intact cells.

Immunofluorescence analysis using a TLE1 antibody is widely used to investigate subcellular localization and nuclear organization of transcriptional regulatory proteins. Because TLE1 functions as a transcriptional corepressor that interacts with multiple DNA-binding transcription factors, IF staining can reveal distinct nuclear fluorescence patterns reflecting transcriptional regulatory complexes. TLE1 immunofluorescence antibody staining is therefore useful for evaluating the spatial distribution of transcriptional repression machinery and for visualizing how TLE1 participates in chromatin-associated signaling pathways in different cellular contexts.

Fluorescence microscopy approaches also allow co-localization studies between TLE1 and other nuclear transcriptional regulators, helping researchers evaluate how Groucho/TLE family corepressors interact with transcription factors and chromatin-modifying proteins. Using immunofluorescence imaging, investigators can compare TLE1 nuclear fluorescence with markers of transcriptional activity, chromatin organization, or nuclear substructures, providing insights into the architecture of transcriptional repression complexes. These imaging approaches make TLE1 Antibody for IF particularly useful for studies focused on transcription factor signaling, nuclear protein localization, and regulatory complex assembly.

Because Transducin-Like Enhancer Protein 1 is a chromatin-associated nuclear protein, immunofluorescence detection provides a powerful method for visualizing TLE1 expression at the cellular level. Fluorescent staining enables researchers to directly observe nuclear localization patterns and evaluate transcriptional regulatory networks within cells. As a result, TLE1 immunofluorescence antibody reagents are valuable tools for fluorescence microscopy experiments designed to investigate transcriptional repression mechanisms, nuclear protein distribution, and the cellular organization of regulatory signaling pathways.

Application Notes

Titration of the TLE1 Antibody for IF / Transducin-Like Enhancer Protein 1 Immunofluorescence Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This TLE1 Antibody for IF / Transducin-Like Enhancer Protein 1 Immunofluorescence Antibody was produced from a rabbit immunized with a KLH conjugated synthetic peptide between 187-221 amino acids from the N-terminal region of human TLE1.

Storage

Aliquot the TLE1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Groucho homolog transcriptional corepressor TLE1 antibody, Transducin-like enhancer protein 1 antibody, Groucho family transcriptional corepressor TLE1 antibody, Amino-terminal enhancer of split homolog antibody, AES family transcriptional corepressor antibody

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