TLE1 Antibody for IHC / Transducin-Like Enhancer Protein 1 Antibody [clone MSVA-856R] (V6122)

Catalog No.	Formulation	Size
V6122-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6122-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-856R
UniProt	Q04724
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This TLE1/Transducin like enhancer of split 1 antibody is available for research use only.



TLE1 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Transducin-like enhancer protein 1 TLE1 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal TLE1 antibody clone MSVA-856R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates nuclear localization consistent with the function of TLE1 as a transcriptional corepressor. Within tumor tissue microarrays, strong nuclear staining is observed in synovial sarcoma samples, supporting its established use as an immunohistochemistry marker for synovial sarcoma and related soft tissue tumors, while most normal tissues show absent or minimal nuclear signal. Evaluation across large TMA panels enables direct comparison of TLE1 expression across diverse tissue types under standardized conditions, with variable expression observed in selected epithelial and tumor tissues. The observed staining patterns align with reported TLE1 expression profiles in large-scale datasets including the Human Protein Atlas.

Description

Transducin-Like Enhancer Protein 1 (TLE1) is a nuclear transcriptional corepressor encoded by the human TLE1 gene

and belongs to the Groucho/TLE family of transcriptional regulators that modulate developmental and differentiation pathways. TLE1 Antibody for IHC / Transducin-Like Enhancer Protein 1 IHC Antibody (clone MSVA-856R) is optimized for immunohistochemistry detection of nuclear TLE1 expression in formalin-fixed paraffin-embedded tissue sections. In surgical pathology, TLE1 immunohistochemistry is widely used as a diagnostic marker because strong nuclear staining is commonly observed in synovial sarcoma and certain other soft tissue tumors.

TLE1 antibody, also referred to as Transducin-like enhancer protein 1 antibody or Groucho-related TLE1 antibody in the literature, recognizes a transcriptional corepressor that functions by interacting with multiple DNA-binding transcription factors and chromatin regulatory complexes. Unlike classical transcription factors, TLE1 does not bind DNA directly but instead acts as a scaffold protein that recruits histone deacetylases and other chromatin remodeling proteins to suppress transcriptional activity. Through these interactions, TLE1 participates in several signaling pathways including Notch signaling, Wnt signaling, and other developmental regulatory networks that control cellular differentiation and tissue development.

Within the nucleus, TLE1 contains a conserved N-terminal Q-rich oligomerization domain and a C-terminal WD repeat domain that mediates interactions with transcription factors and regulatory protein complexes. These structural elements allow TLE1 to form transcriptional repression complexes that regulate gene expression programs involved in embryogenesis, lineage specification, and cellular proliferation. As a result, TLE1 expression patterns can reflect the transcriptional state of specific cell populations and tumor types.

In diagnostic immunohistochemistry, TLE1 staining is particularly valuable in the evaluation of synovial sarcoma, where strong and diffuse nuclear staining is frequently observed in tumor cells. TLE1 immunohistochemistry is therefore commonly incorporated into antibody panels used to evaluate spindle cell and soft tissue tumors. When interpreted alongside additional markers and morphologic features, TLE1 staining can assist pathologists in distinguishing synovial sarcoma from other spindle cell neoplasms and soft tissue malignancies.

Tissue microarray analysis has become an important tool for evaluating the specificity and distribution of immunohistochemical markers across large numbers of tissues. Human tissue microarray (TMA) studies containing multiple normal tissues and tumor types allow systematic assessment of TLE1 immunohistochemistry staining patterns under standardized experimental conditions. These TMA datasets often demonstrate strong nuclear staining in synovial sarcoma while showing more limited expression in most normal tissues, supporting the diagnostic utility of TLE1 as a tumor-associated immunohistochemical marker.

A recombinant rabbit monoclonal clone MSVA-856R antibody targets Transducin-Like Enhancer Protein 1 and enables sensitive nuclear detection of TLE1 protein in immunohistochemistry applications. This antibody is useful for studying transcriptional regulatory pathways and for evaluating TLE1 expression patterns in tumor tissue sections and tissue microarray (TMA) panels used in biomarker research and pathology investigations.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the TLE1 Antibody for IHC / Transducin-Like Enhancer Protein 1 Antibody should be determined by the researcher.

2. This TLE1/Transducin like enhancer of split 1 antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

Recombinant human TLE1 fragment (around amino acids 175-338) (exact sequence is proprietary) was used as the immunogen for the TLE1 Antibody for IHC.

Storage

TLE1/Transducin like enhancer of split 1 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

TLE1 antibody, Transducin-like enhancer protein 1 antibody, Groucho-related protein TLE1 antibody, Groucho homolog TLE1 antibody, Transducin-like enhancer of split 1 antibody, TLE transcriptional corepressor antibody

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