

Transgelin (SM22-alpha) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone TAGLN/247] Catalog # AH12372

Product Information

| Application | IF, FC, IHC-P |
|-------------------|-----------------------------------|
| Primary Accession | <u>Q01995</u> |
| Other Accession | <u>6876</u> , <u>410977</u> |
| Reactivity | Human, Mouse, Rabbit, Pig, Bovine |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Clone Names | TAGLN/247 |
| Calculated MW | 22611 |

Additional Information

| Gene ID | 6876 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Other Names | Transgelin, 22 kDa actin-binding protein, Protein WS3-10, Smooth muscle protein 22-alpha, SM22-alpha, TAGLN, SM22, WS3-10 |
| Application Note | IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | Transgelin (SM22-alpha) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| Name | TAGLN |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Synonyms | SM22, WS3-10 |
| Function | Actin cross-linking/gelling protein (By similarity). Involved in calcium interactions and contractile properties of the cell that may contribute to replicative senescence. |
| Cellular Location | Cytoplasm. |

Background

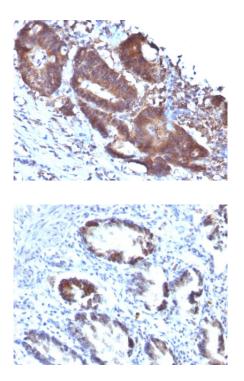
This MAb recognizes a 22kDa protein, identified as Transgelin, also designated SM22-alpha. It may cross-react with SM22-beta. Transgelin is expressed abundantly in smooth muscle cells. The human

transgelin gene encodes a 201 amino acid protein that contains nuclear factor-binding motifs known to regulate transcription in smooth muscle. During embryogenesis, transgelin is expressed in smooth, cardiac and skeletal muscle, but is restricted during late fetal development and adulthood to all vascular and visceral smooth muscle cells and low levels of expression in heart. Transgelin is down regulated in several transformed cell lines, indicating that a reduction of transgelin expression may be an early indicator of the onset of transformation. Transgelin also binds Actin, causing Actin fibers to gel within minutes of binding. Binding of transgelin to Actin occurs at a ratio of 1:6 Actin monomers.

References

Shapland, C., et al. 1993. Purification and properties of transgelin: a transformation and shape change sensitive Actin-gelling protein. J. Cell Biol. 121: 1065-1073

Images



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Transgelin Monoclonal Antibody (TAGLN/247)

Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Transgelin Monoclonal Antibody (TAGLN/247)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.