

Mouse Anti-Transgelin (SM22-alpha) [SPM606]: MC0099

Intended Use: For Research Use Only

Description: This antibody 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.

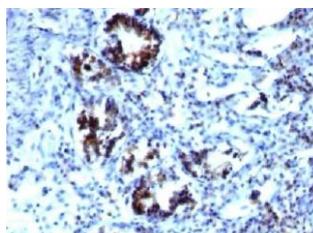
Specifications

Clone: SPM606
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human, cow, pig, rabbit, mouse
 Localization: Cytoplasm
 Formulation: Protein A/G purified antibody from bioreactor concentrate. Prepared in 10mM PBS with 0.2% BSA and < 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles
 Applications: IHC, Flow Cyt, ICC/IF
 Package:

Description	Catalog No.	Size
Transgelin (SM22-alpha) Concentrated	MC0099	1 ml

IHC Procedure*

Positive Control Tissue: U-2 OS, Hs68 or WI 38 cells. Colon carcinoma
 Concentrated Dilution: 50-200
 Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human colon carcinoma stained with anti-Transgelin using DAB

References

1. Expression of Cofilin-1 and Transgelin in Esophageal Squamous Cell Carcinoma. Zhang Y, et al. Med Sci Monit. Sep 7;21:2659-65, 2015.
2. Identification of prosaposin and transgelin as potential biomarkers for gallbladder cancer using quantitative proteomics. Sahasrabudde NA, et al. Biochem Biophys Res Commun. Apr 18;446(4):863-9, 2014. Transgelin is a novel marker of smooth muscle differentiation that improves diagnostic accuracy of leiomyosarcomas: a comparative immunohistochemical reappraisal of myogenic markers in 900 soft tissue tumors. Robin YM, et al. Mod Pathol. Apr;26(4):502-10, 2013.
3. Purification and properties of transgelin: a transformation and shape change sensitive Actin-gelling protein. Shapland, C., et al. J. Cell Biol. 121: 1065-1073, 1993.

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