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Anti-SMA, mouse monoclonal (BS66)

BSH-7459-100 (0,1ml), BSH-7459-1 (1 ml)

Clonality:	Mouse monoclonal antibody
Clone:	BS66
Application:	IHC-P (1:100 – 1:400), IHC-Fro
Species Reactivity:	Human, mouse, rabbit, rat, pig, sheep, dog
Control tissues:	Liver, appendix
Buffer:	TRIS with 0.03% sodium azide, pH 7,2
Storage:	Store at 4°C

Description

The protein encoded by ACTA2 gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This smooth muscle specific alpha actin (SMA) stains actin from smooth muscle cells, myoepithelial cells, and myofibroblasts without cross-reaction of skeletal muscle. SMA is used especially for detection of leiomyomatous and myofibroblastic tumours, GIST and mesenchymal tumors.

Protocol

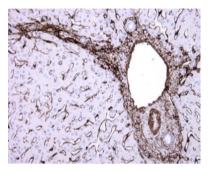
After paraffin removing and rehydration:

- 1. Pretreatment: HIER pH9
- 2. Wash (TBS-Tween)
- 3. Primary antibody: SMA 1:100 1:400, 30 min.
- 4. Wash
- 5. 3% H₂O₂, 10 min.*
- 6. Wash
- 7. BioSite Histo HRP One-Step Polymer (KDB-10007), 30 min
- 8. Wash
- 9. Wash
- 10. DAB high contrast Kit (BCB-20032), 10 min
- 11. Aqua
- 12. CuSO₄ -post enhancement, 5 min
- 13. Aqua
- 14. Counter staining in diluted Mayer, 1 min
- 15. Bluing, 7 min in tap water
- 16. Dehydration, clearing and mounting

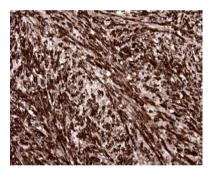
Dilution of this concentrated antibody depends on the detection system used and the final working dilution need to always be determined by the user. * Optional; Endogenous peroxidase blocking can also be done before primary antibody incubation.







Liver section has been stained using SMA optibody (BS66) with 1:200 dilution. Endothelial cells of sinusoids and portal area have strongly stained without staining of the bile ducts.



Leiomyoma section has been stained using SMA optibody (BS66) with 1:200 dilution. All the neoplastic cells have moderate to strong staining reaction without background staining.



GIST -section has been stained using SMA optibody (BS66) with 1:200 dilution. GIST cells have heterogeneous staining pattern.