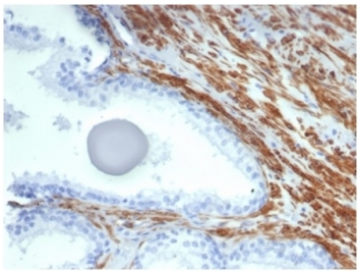
Recombinant SMMHC Antibody / Smooth Muscle Myosin Heavy Chain [clone MYH11/7087R] (V9683)

Catalog No.	Formulation	Size
V9683-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9683-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9683SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

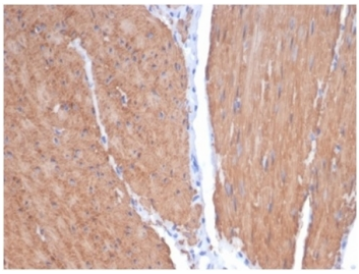
Recombinant RABBIT MONOCLONAL

Bulk quote request

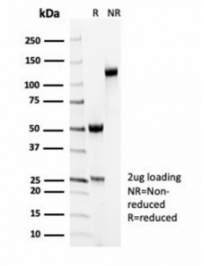
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MYH11/7087R
Purity	Protein A/G affinity
UniProt	P35749
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This recombinant SMMHC antibody is available for research use only.



Recombinant SMMHC Antibody Prostate IHC. Immunohistochemical staining of FFPE human prostate tissue demonstrates Smooth Muscle Myosin Heavy Chain expression using recombinant SMMHC antibody clone MYH11/7087R. SMMHC, encoded by the MYH11 gene, is a highly specific marker of differentiated smooth muscle and myoepithelial cells. Strong cytoplasmic staining highlights the smooth muscle stroma surrounding prostatic glands, while the glandular epithelium remains largely negative. This characteristic distribution reflects the abundant contractile smooth muscle component of the prostate and underscores the utility of SMMHC as a marker of smooth muscle differentiation. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining. These results support the utility of SMMHC Antibody for studies of prostate histology, smooth muscle biology, and diagnostic pathology.



Recombinant SMMHC Antibody Smooth Muscle IHC. Immunohistochemical staining of FFPE human smooth muscle tissue demonstrates robust expression of Smooth Muscle Myosin Heavy Chain using recombinant SMMHC antibody clone MYH11/7087R. SMMHC, encoded by the MYH11 gene, is a principal component of the contractile apparatus and one of the most specific markers of mature smooth muscle differentiation. Strong diffuse cytoplasmic staining is observed throughout bundles of spindle-shaped smooth muscle cells, consistent with the abundant expression of MYH11 in contractile tissues. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining. These results support the utility of SMMHC Antibody for studies of vascular biology, smooth muscle pathology, and tissue differentiation.



SDS-PAGE analysis of purified, BSA-free recombinant SMMHC antibody (clone MYH11/7087R) as confirmation of integrity and purity.

Description

Smooth Muscle Myosin, heavy chain (SMM-HC) is a cytoplasmic structural protein that is a major component of the contractile apparatus of the smooth muscle cells. Expression of smooth muscle myosin is developmentally regulated, appearing early and is specific for smooth muscle development. SM-MHC stains the intact myoepithelial cell (MEC) layers present in benign and in situ malignant breast and bronchioloalveolar lesions and is therefore very helpful in distinguishing between benign and malignant tumors. The antibody reacts with smooth muscle cells and myoepithelial cells, but not with myofibroblasts. It is very helpful in distinguishing between benign sclerosing breast lesions and infiltrating carcinomas in difficult cases since it strongly stains the myoepithelial layer in the benign lesions while it is negative in the infiltrating carcinomas.

Visit our SMMHC Antibody page to discover additional antibodies against this Smooth Muscle Differentiation Marker, including reagents for studies of vascular biology, contractility, and smooth muscle pathology.

Application Notes

Optimal dilution of the recombinant SMMHC antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1-100 of Myosin protein was used as the immunogen for the recombinant SMMHC antibody.

Storage

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

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