# abcam

### Product datasheet

# Anti-Slow Skeletal Myosin Heavy chain antibody - Cterminal ab197687

## 1 Image

#### Overview

**Product name** Anti-Slow Skeletal Myosin Heavy chain antibody - C-terminal

**Description** Rabbit polyclonal to Slow Skeletal Myosin Heavy chain - C-terminal

**Host species** Rabbit

**Tested applications** Suitable for: IHC-P Reacts with: Human **Species reactivity** 

Predicted to work with: Mouse, Rat

**Immunogen** Recombinant fragment (GST-tag) within Human Slow Skeletal Myosin Heavy chain (C terminal).

> The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your

needs, please **contact** our Scientific Support team to discuss your requirements.

Database link: P12883

Positive control Human colon cancer tissue.

**General notes** The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.4

Preservative: 0.05% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 49% PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab197687 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/10 - 1/50.

#### **Target**

**Function** 

Tissue specificity

Involvement in disease

Muscle contraction.

Both wild type and variant Gln-403 are detected in skeletal muscle (at protein level).

Defects in MYH7 are the cause of cardiomyopathy familial hypertrophic type 1 (CMH1)

[MIM:192600]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. Defects in MYH7 are the cause of myopathy myosin storage (MYOMS) [MIM:608358]. In this disorder, muscle biopsy shows type 1 fiber predominance and increased interstitial fat and connective tissue. Inclusion bodies consisting of the beta cardiac myosin heavy chain are present in the majority of type 1 fibers, but not in type 2 fibers.

Defects in MYH7 are the cause of scapuloperoneal myopathy MYH7-related (SPMM)

[MIM:181430]; also known as scapuloperoneal syndrome myopathic type. SPMM is a progressive muscular atrophia beginning in the lower legs and affecting the shoulder region earlier and more severely than distal arm.

Defects in MYH7 are a cause of cardiomyopathy dilated type 1S (CMD1S) [MIM:613426]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. Defects in MYH7 are the cause of myopathy distal type 1 (MPD1) [MIM:160500]. MPD1 is a muscular disorder characterized by early-onset selective weakness of the great toe and ankle dorsiflexors, followed by weakness of the finger extensors. Mild proximal weakness occasionally develops years later after the onset of the disease.

Sequence similarities

Contains 1 IQ domain.

Contains 1 myosin head-like domain.

Domain

The rodlike tail sequence is highly repetitive, showing cycles of a 28-residue repeat pattern

composed of 4 heptapeptides, characteristic for alpha-helical coiled coils.

Each myosin heavy chain can be split into 1 light meromyosin (LMM) and 1 heavy meromyosin

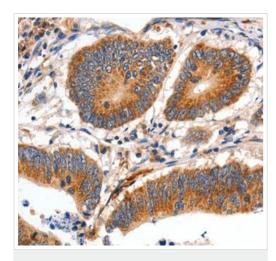
(HMM). It can later be split further into 2 globular subfragments (S1) and 1 rod-shaped

subfragment (S2).

**Cellular localization** 

Cytoplasm > myofibril. Thick filaments of the myofibrils.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Slow Skeletal Myosin
Heavy chain antibody - C-terminal (ab197687)

Immunohistochemical analysis of paraffin-embedded Human colon cancer tissue labeling Slow Skeletal Myosin Heavy chain with ab197687 at 1/12.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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