abcam

ab283683

Anti-Creatine Kinase MM antibody [EPR25358-10]

Recombinant | RabMAb | Advanced Validation | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR25358-10
Purification technique	Affinity purification Protein A
Specificity	ICC/IF and Flow Cyt (Intra) not suitable for mouse.
Concentration	0.539 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

mIHC

Tested

Species	Human
Dilution info	0.18 µg/mL
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Tested

Species	Rat
Dilution info	1/100
Notes	-

Species	Mouse
Dilution info	1/100
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.

Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000 - 1/2000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/2000
Notes	-

Species	Human
Dilution info	1/2000 - 1/2000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/5000
Notes	-

Species	Mouse
Dilution info	1/5000
Notes	-

Species	Rat
Dilution info	1/5000
Notes	-

Target data

See full target information CKM

Function	Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

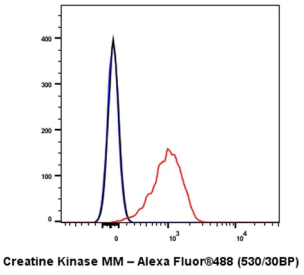
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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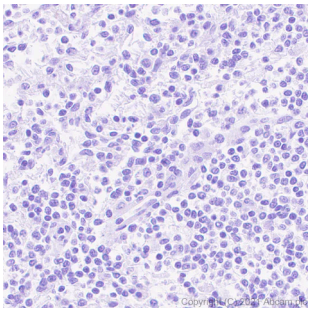
14 product images



Flow Cytometry (Intracellular) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Flow Cytometry (Intracellular) staining using rabbit Anti-Creatine Kinase MM antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized A-673 (Human muscle Ewing's Sarcoma) cells labelling Creatine Kinase MM with ab283683 at 1/50 dilution (1ug)/ red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.

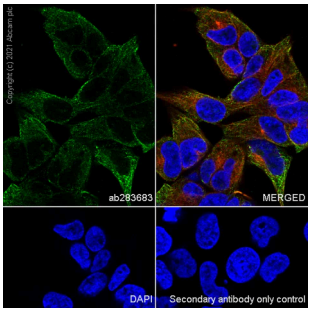


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Creatine Kinase MM antibody

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labelling Creatine Kinase MM with ab283683 at 1/10000 (0.054 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer). Negative control: No staining on the human spleen. The section was incubated with ab283683 at 4 ° overnight. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

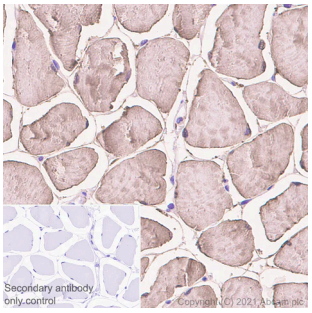
Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0)



Immunocytochemistry/ Immunofluorescence - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Creatine Kinase MM antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A-673 cells labelling Creatine Kinase MM with ab283683 at 1/100 (5.39 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in A-673 cell line. is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.

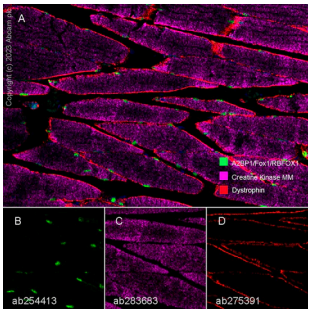


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Creatine Kinase MM antibody

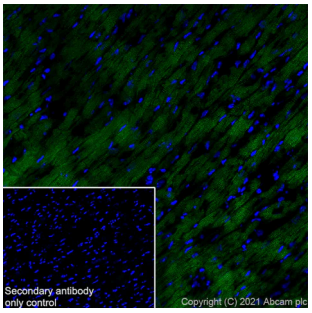
Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labelling Creatine Kinase MM with ab283683 at 1/5000 (0.108 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer). Positive staining on human skeletal muscle. The section was incubated with ab283683 at 4° overnight. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0)



Multiplex immunohistochemistry - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

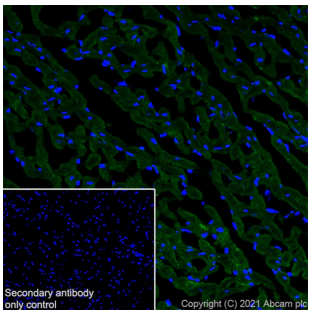
Fluorescence multiplex immunohistochemical analysis of the human skeletal muscle (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-Dystrophin (ab275391, red; Opal™690), anti-A2BP1/Fox1/RBFOX1 (ab254413, green; Opal™520) and anti-Creatine Kinase MM (ab283683, magenta; Opal™570) on human skeletal muscle. Panel B: anti-A2BP1/Fox1/RBFOX1 stained on nucleus of skeletal muscle. Panel C: anti-Creatine Kinase MM stained on cytoplasm of skeletal muscle. Panel D: anti-Dystrophin stained on membrane of skeletal muscle. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The section was incubated in three rounds of staining: in the order of ab275391 at 1/500 (2.08 µg/ml) dilution, ab254413 at 1/2000 (0.239 µg/ml) dilution, and ab283683 at 1/3000 (0.18 µg/ml) dilution for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. DAPI (blue) was used as a nuclear counter stain. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Frozen sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Frozen sections) staining using rabbit Anti-Creatine Kinase MM antibody

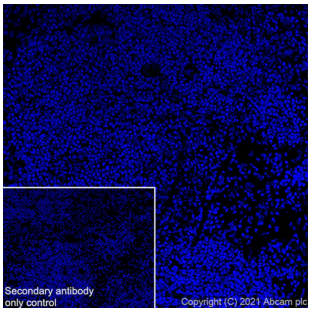
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cardiac muscle (fresh) tissue labeling Creatine Kinase MM with ab283683 at 1/100 (5.39 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (Green). Cytoplasmic staining on mouse cardiac muscle is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 dilution.



Immunohistochemistry (Frozen sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Frozen sections) staining using rabbit Anti-Creatine Kinase MM antibody

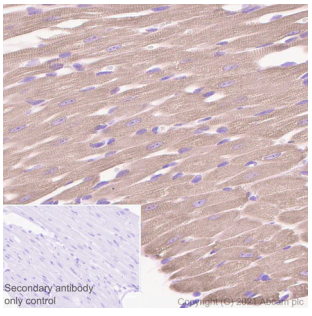
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cardiac muscle (fresh) tissue labeling Creatine Kinase MM with ab283683 at 1/100 (5.39 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (Green). Cytoplasmic staining on rat cardiac muscle is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 dilution.



Immunohistochemistry (Frozen sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Frozen sections) staining using rabbit Anti-Creatine Kinase MM antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat spleen (fresh) tissue labeling Creatine Kinase MM with ab283683 at 1/100 (5.39 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (Green). No staining on rat spleen is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 dilution.



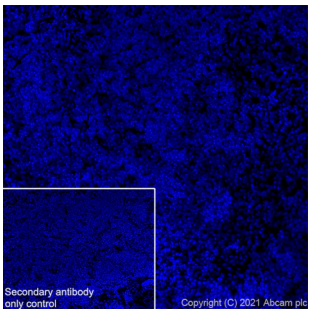
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Creatine Kinase MM antibody

Immunohistochemical analysis of paraffin-embedded Mouse cardiac muscle tissue labelling Creatine Kinase MM with ab283683 at 1/10000 (0.054 ug/ml) followed by a ready to use Goat Anti-

Rabbit IgG H&L (HRP polymer). Cytoplasmic staining on mouse cardiac muscle. The section was incubated with ab283683 at 4° overnight. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

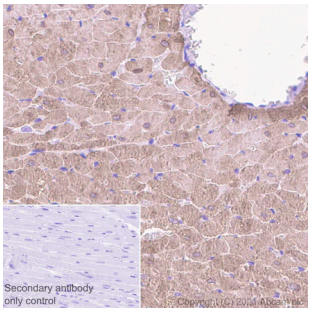
Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0)



Immunohistochemistry (Frozen sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Frozen sections) staining using rabbit Anti-Creatine Kinase MM antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse spleen (fresh) tissue labeling Creatine Kinase MM with ab283683 at 1/100 (5.39 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (Green). No staining on mouse spleen is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 dilution.

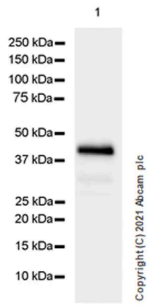


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Creatine Kinase MM antibody

Immunohistochemical analysis of paraffin-embedded Rat cardiac muscle tissue labelling Creatine Kinase MM with ab283683 at 1/10000 (0.054 ug/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer). Positive staining on rat cardiac muscle. The section was incubated with ab283683 at 4° overnight. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0)



Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Western blot staining of Human heart tissue lysate using rabbit Anti-Creatine Kinase MM antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 1 second

All lanes:
Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683) at 1/2000 dilution

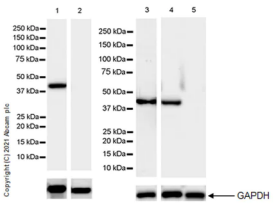
All lanes:
Human heart tissue lysate

Secondary

All lanes:

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 43 kDa



Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Western blot staining using rabbit Anti-Creatine Kinase MM antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
Exposure time: Lanes 1-2: 3 seconds, Lane 3: 48 seconds; Lanes 4-5: 6 seconds.

The molecular weight observed is consistent with what has been described in the literature (PMID: 22066028).

No expression was observed in spleen.

All lanes:
Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683) at 1/2000 dilution

Lane 1:
Mouse heart tissue lysate at 20 µg

Lane 2:
Mouse spleen tissue lysate at 20 µg

Lane 3:
A-673 (Human muscle Ewing's sarcoma) whole cell lysate at 20 µg

Lane 4:
Rat heart tissue lysate at 20 µg

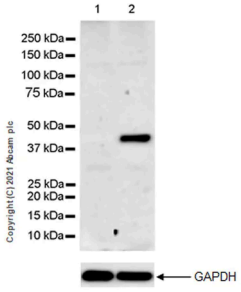
Lane 5:
Rat spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 43 kDa

Observed band size: 43 kDa



Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683)

Creatine Kinase MM Western blot staining using rabbit Anti-Creatine Kinase MM antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBSTCK protein level is low in undifferentiated myoblasts and becomes strikingly upregulated as differentiation progresses. The expression profile observed is consistent with what has been described in the literature (PMID: 22703875).
Exposure time: 3 minutes

All lanes:
Western blot - Anti-Creatine Kinase MM antibody [EPR25358-10] (ab283683) at 1/1000 dilution

Lane 1:
Untreated C2C12 (mouse myoblasts myoblast) whole cell lysate

Lane 2:
C2C12 treated with 2% horse serum for 6 days whole cell lysate

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 43 kDa

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