abcam

ab195207

Anti-pan-myc antibody [EPR18863]

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	EPR18863
Purification technique	Affinity purification Protein A
Concentration	0.711 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ChIC/CUT&RUN-seq

Tested

Species	Human
Dilution info	5 µg
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/250
Notes	-

Species	Human
Dilution info	1/250
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/60
Notes	-

Expected

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

Target data

See full target information MYC

Function	Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3' (PubMed:24940000, PubMed:25956029). Activates the transcription of growth-related genes (PubMed:24940000, PubMed:25956029). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed:24940000, PubMed:25956029). Regulator of somatic reprogramming, controls self-renewal of embryonic stem cells (By similarity). Functions with TAF6L to activate target gene expression through RNA polymerase II pause release (By similarity). Positively regulates transcription of HNRNPA1, HNRNPA2 and PTBP1 which in turn regulate splicing of pyruvate kinase PKM by binding repressively to sequences flanking PKM exon 9, inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (PubMed:20010808).

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Pan-MYC refers to a group of transcription factors in the MYC family primarily comprising c-Myc N-Myc and L-Myc with c-Myc weighing around 49 kDa. MYC proteins are nuclear phosphoproteins that regulate gene expression. MYC proteins express in various tissues including embryonic stem cells and proliferating cells and they are known for their involvement in cell cycle progression apoptosis and cellular transformation.
Biological function summary	MYC proteins perform an important role in the regulation of transcription by binding to DNA at E-box sequences. They function as part of the MYC/MAX/MAD network a transcriptional complex with MAX as the obligate partner. This network influences genes involved in cellular growth metabolism and differentiation. Deregulation of MYC proteins affects many cellular processes and can influence normal physiology.
Pathways	The MYC proteins are central to the regulation of the cell cycle and Wnt signaling pathways. In the PI3K/Akt signaling MYC interacts with other signaling molecules to control cell growth and survival. The E-box binding allows MYC to regulate multiple downstream targets including cyclins and growth factor receptors. MYC's ability to form a complex with MAX also interlinks it with other survival and proliferation pathways.
Associated diseases and disorders	Aberrant MYC expression correlates with various cancers such as Burkitt's lymphoma and neuroblastoma. Overexpression of MYC often results from chromosomal translocations or gene amplifications in these malignancies. MYC's connection with the BCL2 protein leads to the disruption of apoptosis promoting oncogenic transformation. Control of MYC expression and function remains a critical focus in cancer research due to its role in tumor development.

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.

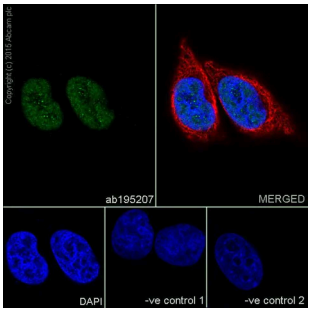
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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10 product images



Immunocytochemistry/ Immunofluorescence - Anti-pan-myc antibody [EPR18863] (ab195207)

Pan-myc Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-pan-myc antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling pan-myc with ab195207 at 1/250 dilution followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal image showing nuclear staining on HeLa cell line.

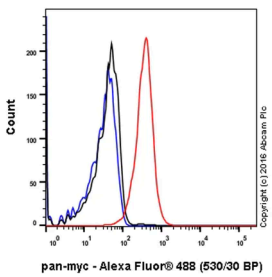
The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab195207 at 1/250 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

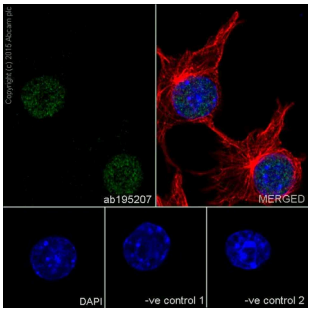
-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-pan-myc antibody [EPR18863] (ab195207)

Pan-myc Flow Cytometry (Intracellular) staining using rabbit Anti-pan-myc antibody

Intracellular Flow Cytometry analysis of HeLa cells labelling pan-myc (red) with purified ab195207 at dilution of 1/60. The secondary antibody used was Alexa Fluorr® 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody was Rabbit monoclonal IgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-pan-myc antibody [EPR18863] (ab195207)

Pan-myc Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-pan-myc antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) cells labeling pan-myc with ab195207 at 1/250 dilution followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal image showing nuclear staining on RAW 264.7 cell line.

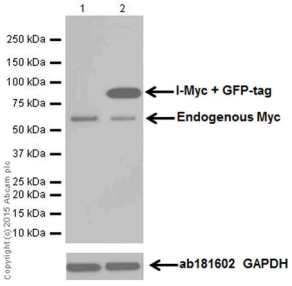
The nuclear counterstain is DAPI (blue).

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-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/2000 dilution

Lane 1:
HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate transfected with empty vector (vector control) at 10 µg

Lane 2:
HEK-293 whole cell lysate transfected with L-Myc with GFP-tag at 10 µg

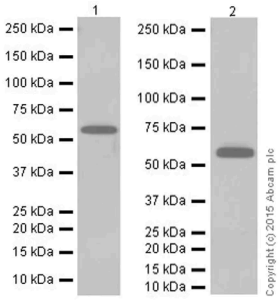
Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 57 kDa, 83 kDa

Exposure time: 3min



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Pan-myc Western blot staining using rabbit Anti-pan-myc antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/1000 dilution

Lane 1:
HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 10 µg

Lane 2:
HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate at 10 µg

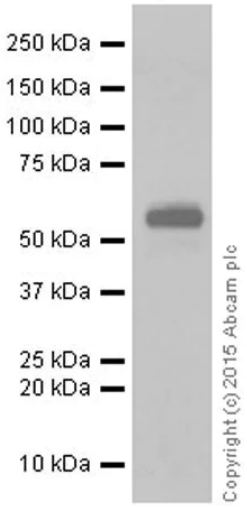
Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 57 kDa

Exposure time: 3min



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Pan-myc Western blot staining of K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate using rabbit Anti-pan-myc antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/2000 dilution

All lanes:
K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate at 20 µg

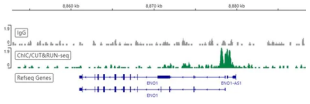
Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 57 kDa

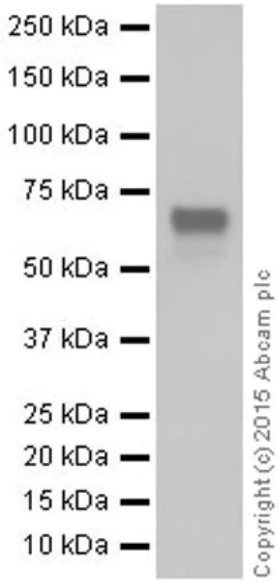
Exposure time: 3min



ChIC/CUT&RUN sequencing - Anti-pan-myc antibody [EPR18863] (ab195207)

ChIC/CUT&RUN was performed using a pAG-MNAse at a final concentration of 700 ng/mL, 2 x 10^5 HeLa (Human cervix adenocarcinoma epithelial cell line) cells and 5µg of ab195207 [EPR18863].

The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control ab172730 is also shown. Additional screenshots of mapped reads can be found in the Protocol booklet in the Product Protocol section. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Blocking/Dilution buffer: 5% NFDM/TBST.
The observed molecular weight for the mouse species is slightly higher than human Myc, this could be due to different degree of glycosylation.

All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/1000 dilution

All lanes:
RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

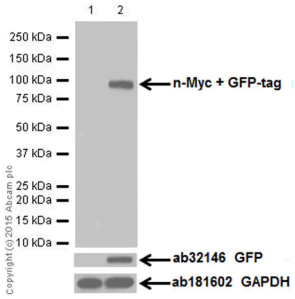
Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 60 kDa

Exposure time: 30s



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/5000 dilution

Lane 1:
HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate transfected with empty vector (vector control) at 10 µg

Lane 2:
HEK-293 whole cell lysate transfected with n-Myc with GFP-tag at 10 µg

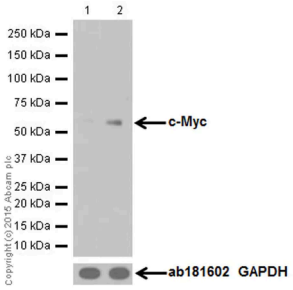
Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 83 kDa

Exposure time: 3s



Western blot - Anti-pan-myc antibody [EPR18863] (ab195207)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-pan-myc antibody [EPR18863] (ab195207) at 1/1000 dilution

Lane 1:
HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate transfected with empty vector (vector control) at 10 µg

Lane 2:
HEK-293 whole cell lysate transfected with c-Myc at 10 µg

Secondary

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

Predicted band size: 40 kDa, 49 kDa, 50 kDa

Observed band size: 57 kDa

Exposure time: 3min

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