abcam

Product datasheet

Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free ab232691

Recombinant RabMAb

9 Images

Overview

Product name	Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free
Description	Rabbit monoclonal [EPR17924] to c-Myc (phospho S62) - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF, IP, Dot blot, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human c-Myc aa 50-150 (phospho S62). The exact sequence is proprietary. Database link: P01106
Positive control	WB: HeLa, NIH/3T3 and C6 whole cell lysates. IHC-P: Human endometrium cancer, mouse spleen and rat testis tissues. ICC/IF: HeLa cells. IP: HeLa whole cell lysate treated with 200nM TPA for 10 minutes. Flow Cyt: HeLa cells.
General notes	Ab232691 is the carrier-free version of ab185656. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. ab232691 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility. We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™

guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17924
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab232691** in the following tested applications.

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

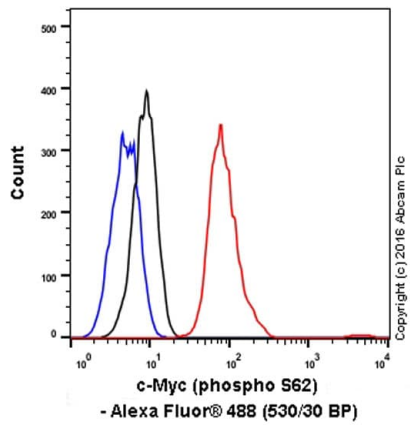
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 57 kDa (predicted molecular weight: 48 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.

Target

Function	Participates in the regulation of gene transcription. Binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-related genes.
Involvement in disease	Note=Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors. Note=A chromosomal aberration involving MYC may be a cause of a form of B-cell chronic lymphocytic leukemia. Translocation t(8;12)(q24;q22) with BTG1. Defects in MYC are a cause of Burkitt lymphoma (BL) [MIM:113970]. A form of undifferentiated malignant lymphoma commonly manifested as a large osteolytic lesion in the jaw or as an abdominal mass. Note=Chromosomal aberrations involving MYC are usually found in Burkitt lymphoma. Translocations t(8;14), t(8;22) or t(2;8) which juxtapose MYC to one of the heavy or light chain immunoglobulin gene loci.
Sequence similarities	Contains 1 basic helix-loop-helix (bHLH) domain.
Post-translational modifications	Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for ubiquitination and degradation by the proteasome. Ubiquitinated by the SCF(FBXW7) complex when phosphorylated at Thr-58 and Ser-62, leading to its degradation by the proteasome. In the nucleoplasm, ubiquitination is counteracted by USP28, which interacts with isoform 1 of FBXW7 (FBW7alpha), leading to its deubiquitination and preventing degradation. In the nucleolus, however, ubiquitination is not counteracted by USP28, due to the lack of interaction between isoform 4 of FBXW7 (FBW7gamma) and USP28, explaining the selective MYC degradation in the nucleolus. Also polyubiquitinated by the DCX(TRUSS) complex.
Cellular localization	Nucleus > nucleoplasm. Nucleus > nucleolus.
Form	c-Myc is also expressed in the cytoplasm.

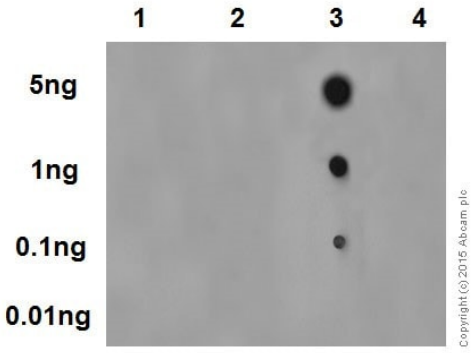
Images



Flow Cytometry - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling c-Myc (phospho S62) with purified ab185656 at 1/150 dilution (red). The secondary antibody was Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution. A Rabbit monoclonal IgG (Black) was used as the isotype control and cells without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).



Dot Blot - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

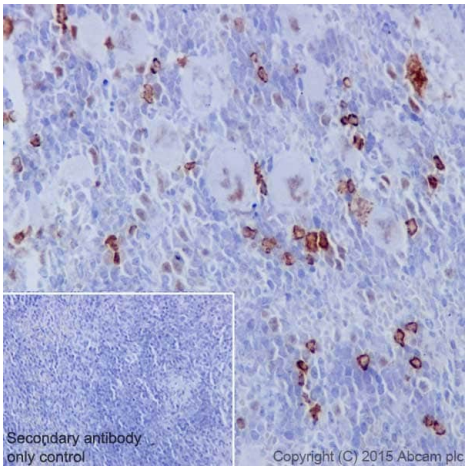
Dot blot analysis of c -Myc (phospho T58) peptide (Lane 1), c-Myc non-phospho peptide (a control peptide for c-Myc phospho T58) (Lane 2), c-Myc (phospho S62) peptide (Lane 3), and c-Myc non-phospho peptide (a control peptide for c-Myc phospho S62) (Lane 4), labeled using ab185656 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution.

Blocking/Dilution buffer: 5% NFDM/TBST.

Lanes 1, 2 and 4 are control peptides, lane 3 contains the immunogen peptide.

Exposure time=3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling c-Myc (phospho S62) with ab185656 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

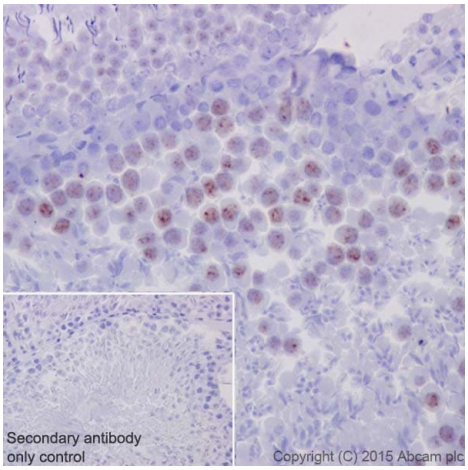
Nuclear and cytoplasmic staining on mouse spleen is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling c-Myc (phospho S62) with ab185656 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

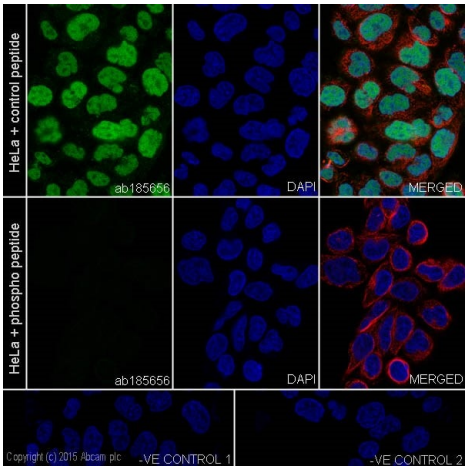
Nuclear staining on rat testis is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling c-Myc (phospho S62) with ab185656 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green).

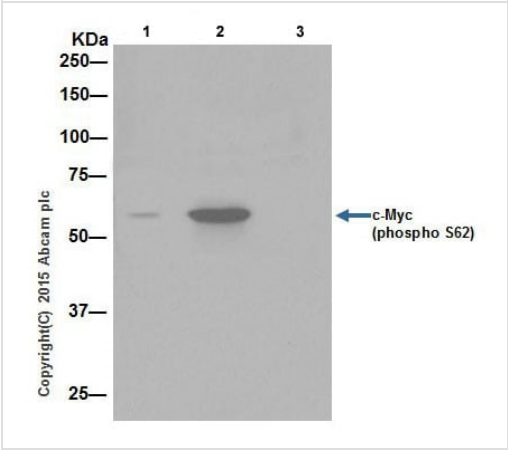
Confocal image showing nuclear staining on HeLa cells.
The staining decreased after blocking with phospho peptide (100µg/ml) overnight.

The control peptide is a non-phospho peptide.

The nuclear counter stain 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 1/500 dilution (red).
The negative controls are as follows:
-ve control 1: ab185656 at 1/1000 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 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 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).



Immunoprecipitation - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

c-Myc (phospho S62) was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate treated with 200nM TPA for 10 minutes with ab185656 at 1/50 dilution.

Western blot was performed from the immunoprecipitate using ab185656 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/1500 dilution.

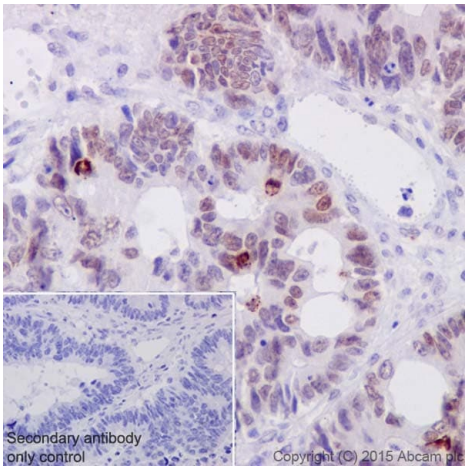
Lane 1: HeLa whole cell lysate treated with 200nM TPA for 10 minutes,10 µg (Input).

Lane 2: ab185656 IP in HeLa whole cell lysate treated with 200nM TPA for 10 minutes.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab185656 in HeLa whole cell lysate treated with 200nM TPA for 10 minutes.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab185656).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

This IHC data was generated using the same anti-phospho S62 c-Myc antibody clone, EPR17924, in a different buffer formulation (cat# ab185656).

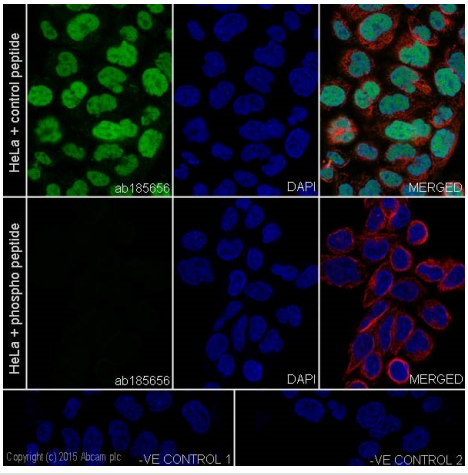
Immunohistochemical analysis of paraffin-embedded Human endometrium cancer tissue labeling c-Myc (phospho S62) with ab185656 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution.

Nuclear staining on cancer cells of Human endometrial cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-c-Myc (phospho S62) antibody [EPR17924] - BSA and Azide free (ab232691)

This ICC/IF data was generated using the same anti-phospho S62 c-Myc antibody clone, EPR17924, in a different buffer formulation (cat# ab185656).

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling c-Myc (phospho S62) with ab185656 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green).

Confocal image showing nuclear staining on HeLa cells.
The staining decreased after blocking with phospho peptide (100µg/ml) overnight.

The control peptide is a non-phospho peptide.

The nuclear counter stain 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 1/500 dilution (red).
The negative controls are as follows:
-ve control 1: ab185656 at 1/1000 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 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 1/500 dilution.

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