

Anti-c-Myc antibody [Y69] ab32072



★★★★☆ 21 Abreviews | 📖 47 References | 12 Images

Overview

Product name	Anti-c-Myc antibody [Y69]
Description	Rabbit monoclonal [Y69] to c-Myc
Specificity	This antibody is specific for c-Myc.
Tested applications	WB, IHC-P, ICC/IF, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to residues in the N terminus of Human c-Myc.

Positive control

Purchase matching WB positive control:
[Active human c-Myc full length protein](#) >

WB: This antibody gave a positive signal in the following whole cell lysates: Jurkat; Raji; K562; THP1; A20; Raw264.7 IF: HeLa cells. IHC-P: Human skin carcinoma.

General notes

Produced using Abcam's RabMAB® technology. RabMAB® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.

This product is available conjugated to DyLight® 488 or DyLight® 594 see [ab139907](#) and [ab139940](#) respectively.

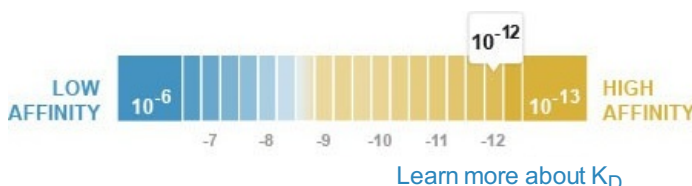
This product is available conjugated to Agarose validated in IP usage - [ab178457](#)

A 40 µl trial size is available to purchase for this product.

Myc is involved in MAPK-p38 signaling pathway - [see the interactive version](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Dissociation constant (K_D)	K _D = 3.80 x 10 ⁻¹² M



Storage buffer	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
Clonality	Monoclonal
Clone number	Y69
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab32072** 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
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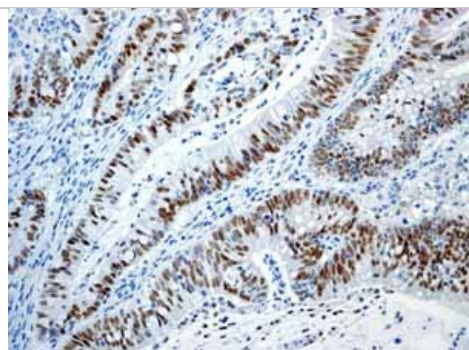
WB	★★★★★
IHC-P	★★★★☆
ICC/IF	★★★★★
IP	★★★★☆

Application notes	<p>ICC/IF: 1/250 - 1/500. IHC-P: 1/50. IP: 1/150. WB: 1/10000. Detects a band of approximately 57 kDa (predicted molecular weight: 49 kDa).</p> <p>Is unsuitable for FACS.</p> <p>Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.</p>
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Target

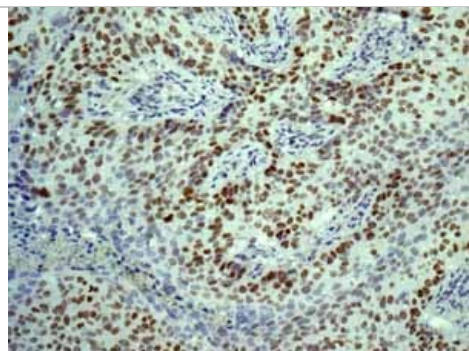
Function	Participates in the regulation of gene transcription. Binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-related genes.
Involvement in disease	<p>Note=Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Sequence similarities	Contains 1 basic helix-loop-helix (bHLH) domain.
Post-translational modifications	<p>Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for ubiquitination and degradation by the proteasome.</p> <p>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.</p>
Cellular localization	Nucleus > nucleoplasm. Nucleus > nucleolus.
Form	c-Myc is also expressed in the cytoplasm.

Anti-c-Myc antibody [Y69] images



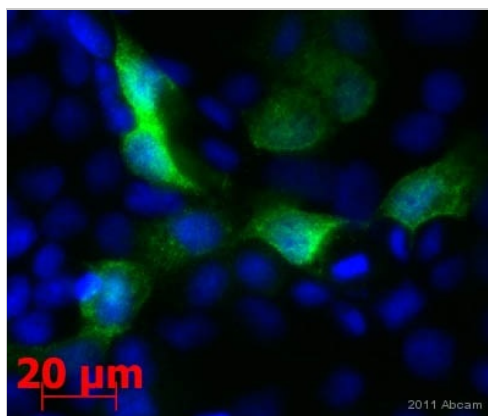
ab32072 showing positive staining in Colonic adenocarcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-c-Myc antibody [Y69](ab32072)



ab32072 showing positive staining in Lung adenocarcinoma tissue.

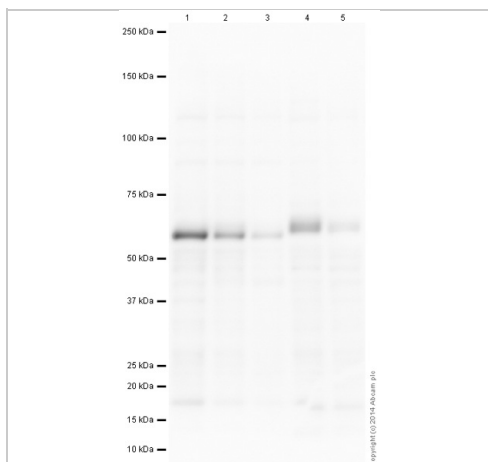
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-c-Myc antibody [Y69](ab32072)



ab32072 staining c-Myc in HEK-293 cells transfected with CACNB4-c-Myc by Immunocytochemistry/ Immunofluorescence. Cells were fixed in paraformaldehyde, permeabilized with 0.5% Triton X-100 then blocked using 5% serum for 20 minutes at 25°C. Samples were then incubated with ab32072 at a 1/250 dilution for 16 hours at 4°C. The secondary used was an Alexa-Fluor 488 conjugated goat anti-rabbit polyclonal, used at a 1/500 dilution.

Immunocytochemistry/
Immunofluorescence - c-Myc antibody
[Y69] (ab32072)

Image courtesy of Dr Vladimir Milenkovic by Abreview.



Western blot - Anti-c-Myc antibody [Y69]
(ab32072)

All lanes : Anti-c-Myc antibody [Y69]
(ab32072) at 1/1000 dilution

Lane 1 : Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate

Lane 2 : K562 (Human erythromyeloblastoid leukemia cell line) Whole Cell Lysate

Lane 3 : THP1 (Human acute monocytic leukemia cell line) Whole Cell Lysate

Lane 4 : A20 (Mouse B lymphoma cell line) Whole Cell Lysate

Lane 5 : RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#))
at 1/50000 dilution
developed using the ECL technique

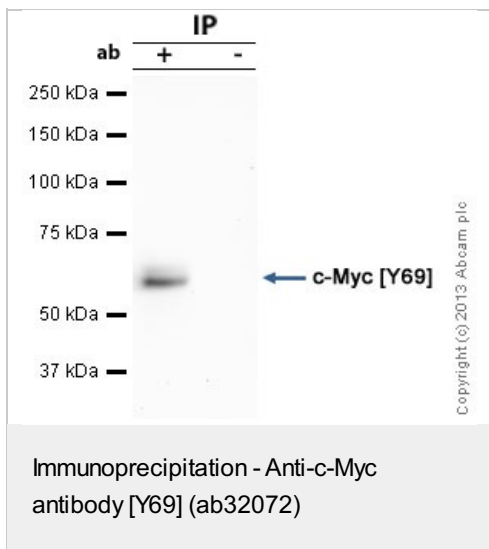
Performed under reducing conditions.

Predicted band size : 49 kDa

Observed band size : 57 kDa

The predicted molecular weight of c-Myc is 48 kDa (SwissProt), however we expect to observe a banding pattern at 57 kDa.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab32072 overnight at 4°C. Antibody binding was detected using an [anti-rabbit HRP](#) antibody, and visualised using ECL development solution [ab133406](#)



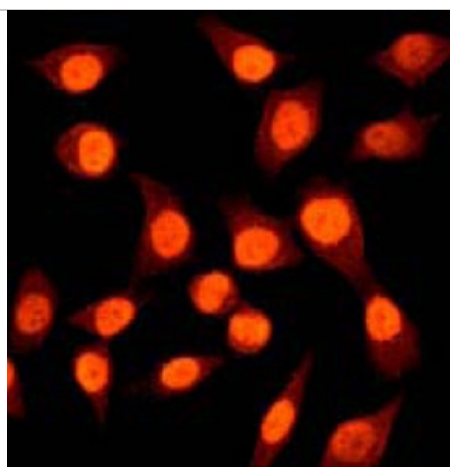
c-Myc was immunoprecipitated using 0.5mg Jurkat whole cell extract, 5µg of Rabbit monoclonal to c-Myc [Y69] and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Jurkat whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab32072.

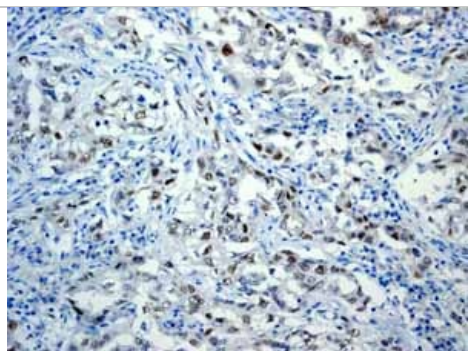
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/20,000 dilution.

Band: 57kDa; c-Myc [Y69]



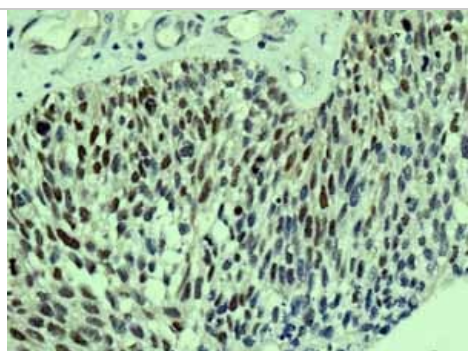
Ab32072, at a dilution of 1/250, staining HeLa cells by Immunofluorescence.

Immunocytochemistry/
Immunofluorescence - c-Myc antibody [Y69] (ab32072)



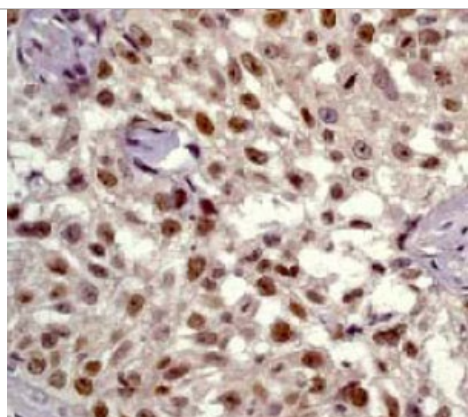
ab32072 showing positive staining in Gastric adenocarcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-c-Myc antibody [Y69](ab32072)



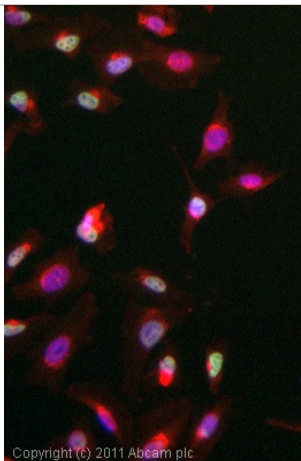
ab32072 showing positive staining in Urinary bladder transitional carcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-c-Myc antibody [Y69](ab32072)



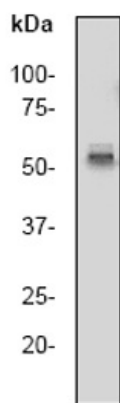
Ab32072, at a dilution of 1/50, staining c-Myc in paraffin embedded human skin carcinoma tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - c-Myc antibody [Y69] (ab32072)



Immunocytochemistry/
Immunofluorescence - c-Myc antibody
[Y69] (ab32072)

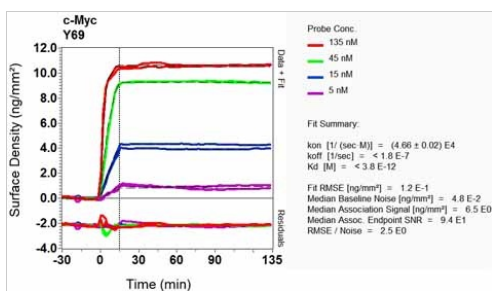
ICC/IF image of ab32072 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab32072, 1µg/ml) overnight at +4°C. The secondary antibody (green) was [anti rabbit DyLight® 488 IgG - H&L, pre-adsorbed \(ab96899\)](#) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - c-Myc antibody [Y69]
(ab32072)

Anti-c-Myc antibody [Y69] (ab32072) at 1/10000 dilution + Jurkat cell lysate.

Predicted band size : 49 kDa
Observed band size : 57 kDa



Other-Anti-c-Myc antibody
[Y69](ab32072)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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