abcam

Product datasheet

HRP Anti-c-Myc antibody ab19312

★★★★★ 2 Abreviews 7 References 2 Images

Overview

Product name	HRP Anti-c-Myc antibody
Description	HRP Rabbit polyclonal to c-Myc
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** ICC/IF, WB
Species reactivity	**Reacts with:** Human, Recombinant fragment
Immunogen	Synthetic peptide corresponding to Human c-Myc aa 410-419 conjugated to keyhole limpet haemocyanin. Sequence: EQKLISEEDL Database link: **P01106** Run BLAST with Run BLAST with
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.
Storage buffer	pH: 6.8 Constituents: 0.2% BSA, 0.05% CMIT/MIT based preservative
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab19312 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
ICC/IF		Use a concentration of 1 µg/ml.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 49 kDa. Colorimetric. Chemiluminescent: 1/1000 - 1/30000.

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.

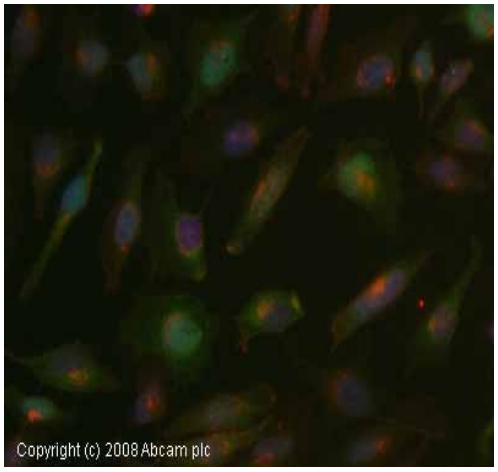
Sequence similarities Contains 1 basic helix-loop-helix (bHLH) domain.

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.

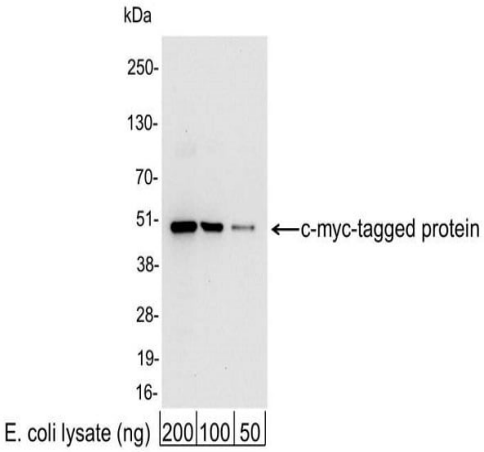
Form c-Myc is also expressed in the cytoplasm.

Images



Immunocytochemistry/ Immunofluorescence - HRP Anti-c-Myc antibody (ab19312)

ICC/IF image of ab19312 stained human 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 (ab19312, 1 µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 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).



Western blot - HRP Anti-c-Myc antibody (ab19312)

All lanes : HRP Anti-c-Myc antibody (ab19312) at 0.4 µg/ml

Lane 1 : E. coli whole cell lysate expressing a multi-tag fusion protein at 0.2 µg
Lane 2 : E. coli whole cell lysate expressing a multi-tag fusion protein at 0.1 µg
Lane 3 : E. coli whole cell lysate expressing a multi-tag fusion protein at 0.05 µg

Predicted band size: 49 kDa

Exposure time: 10 seconds

Detection: Chemiluminesence

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors