

**Anti-c-Myc Antibody**  
Catalog # ABO10873**Specification**

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**Anti-c-Myc Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P01106</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Myc proto-oncogene protein(MYC) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-c-Myc Antibody - Additional Information**

**Gene ID** 4609

**Other Names**

Myc proto-oncogene protein, Class E basic helix-loop-helix protein 39, bHLHe39, Proto-oncogene c-Myc, Transcription factor p64, MYC, BHLHE39

**Calculated MW**

48804 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Nucleus, nucleoplasm . Nucleus, nucleolus .

**Protein Name**

Myc proto-oncogene protein

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human c-Myc(421-439aa RKRREQLKHKLEQLRNSCA), different from the related mouse and rat sequences by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

#### Sequence Similarities

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

### Anti-c-Myc Antibody - Protein Information

Name MYC

Synonyms BHLHE39

#### Function

Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3' (PubMed:<a href="http://www.uniprot.org/citations/24940000" target="\_blank">24940000</a>, PubMed:<a href="http://www.uniprot.org/citations/25956029" target="\_blank">25956029</a>). Activates the transcription of growth-related genes (PubMed:<a href="http://www.uniprot.org/citations/24940000" target="\_blank">24940000</a>, PubMed:<a href="http://www.uniprot.org/citations/25956029" target="\_blank">25956029</a>). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/24940000" target="\_blank">24940000</a>, PubMed:<a href="http://www.uniprot.org/citations/25956029" target="\_blank">25956029</a>). 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:<a href="http://www.uniprot.org/citations/20010808" target="\_blank">20010808</a>).

#### Cellular Location

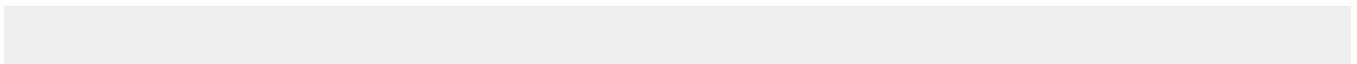
Nucleus, nucleoplasm. Nucleus, nucleolus. Nucleus. Cytoplasm Note=Localization to the nucleolus is dependent on HEATR1

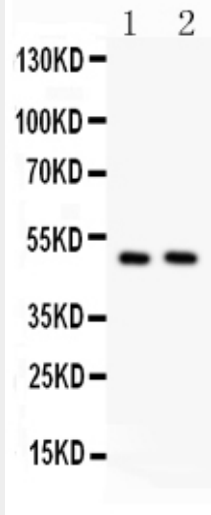
### Anti-c-Myc Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-c-Myc Antibody - Images





Anti-c-Myc antibody, ABO10873, Western blotting All lanes: Anti c-Myc(ABO10873) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: HEPG2 Whole Cell Lysate at 40ug Predicted bind size: 49KD Observed bind size: 49KD

#### **Anti-c-Myc Antibody - Background**

C-Myc is an oncogene that functions both in the stimulation of cell proliferation and in apoptosis. c-Myc elicits its oncogenic activity by causing immortalization, and to a lesser extent the transformation of cells, in addition to several other mechanisms. The c-MYC proto-oncogene encodes a transcription factor that is critical for cell growth and proliferation. It is one of the genes frequently altered in cancer cells in which it exhibits constitutive activity. Downregulation of c-Myc is critical for 2-Methoxyestradiol(2ME2)-induced oxidative stress and apoptosis in AML cells. And its up-regulation is important for promoting lymphocyte cell division, and demonstrating that GFP-c-Myc expression is a marker of proliferating lymphocytes in vivo.