

Anti-c-Myc Antibody

Catalog # ABO10873

Product Information

Application	WB
Primary Accession	P01106
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.

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	50565
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus, nucleoplasm . Nucleus, nucleolus .
Source	Eukaryota
Protein Name	Myc proto-oncogene protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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.

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: 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).
Cellular Location	Nucleus, nucleoplasm. Nucleus, nucleolus. Nucleus. Cytoplasm Chromosome. Note=Association with chromatin is reduced by hyperphosphorylation (PubMed:30158517) Localization to the nucleolus is dependent on HEATR1 (PubMed:38225354)

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.

Images



Anti-c-Myc antibody, ABO10873, Western blottingAll lanes: Anti c-Myc(ABO10873) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 49KDObserved bind size: 49KD

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