10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-c-Myc (Phospho-T58) Antibody

Catalog # AP59629

Product Information

Application	WB, IHC, IP, IF/IC
Primary Accession	P01106
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Chicken, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50565

Additional Information

Gene ID	4609
Other Names	BHLHE39; Myc proto-oncogene protein; Class E basic helix-loop-helix protein 39; bHLHe39; Proto-oncogene c-Myc; Transcription factor p64
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding T58 of human c-Myc protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IP (1/10 - 1/100) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IP (1/10 - 1/100) IP~~N/A IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

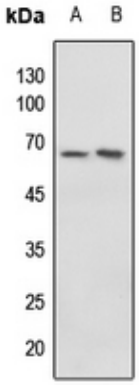
Name	MYC
Synonyms	BHLHE39
Function	Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3' (PubMed:24940000, PubMed:25956029). Activates the transcription of growth-related genes (PubMed:24940000, PubMed:25956029). Binds to the 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).

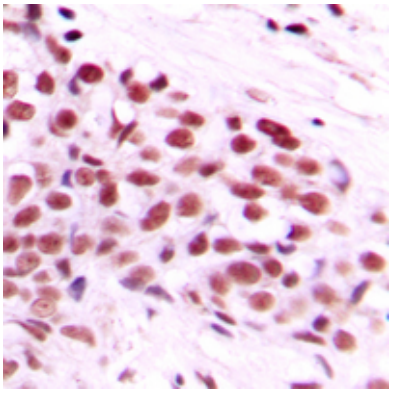
Cellular Location

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)

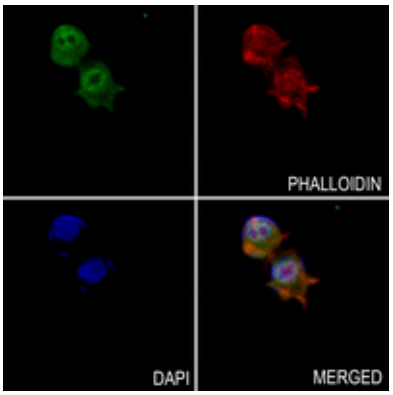
Images



Western blot analysis of c-Myc (Phospho-T58) expression in mouse brain (A), mouse lung (B) whole cell lysates. (Predicted band size: 48 kD; Observed band size: 65 kD)

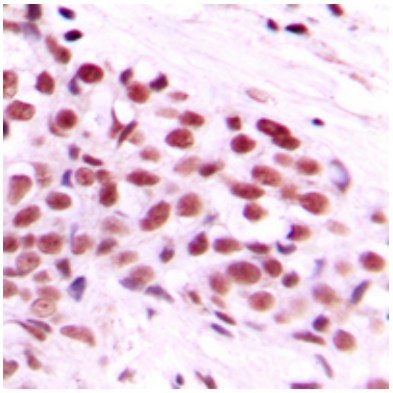


Immunohistochemical analysis of c-Myc (Phospho-T58) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of c-Myc (Phospho-T58) staining in RAW264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of c-Myc (pT58) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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