

## Rabbit Anti-phospho-C-Myc (Ser62) antibody

SL23392R

Product Name:	phospho-C-Myc (Ser62)
Chinese Name:	磷酸化致癌基因C-Myc抗体
Alias:	Myc(Phospho-Ser62); Myc(Phospho-S62); p-Myc(S62); p-Myc(S62); AU016757; Avian myelocytomatosis viral oncogene homolog; bHLHe39; c Myc; Cellular myelocytomatosis oncogene; MGC105490; MRTL; Myc protein; Myc proto oncogene protein; Myc-related translation/localization regulatory factor; Myc2; myca; Myelocytomatosis oncogene a; Myelocytomatosis oncogene; Niard; Nird; Oncogene Myc; Protooncogene homologous to myelocytomatosis virus; RNCMYC; Transcription factor p64; Transcriptional regulator Myc-A; v myc avian myelocytomatosis viral oncogene homolog; v myc myelocytomatosis viral oncogene homolog (avian); V-Myc avian myelocytomatosis viral oncogene homolog; v-myc myelocytomatosis viral oncogene homolog (avian); zc-myc; MYC_HUMAN.
Organism Species:	Rabbit
	Polyclonal
Clonality:	
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	49kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human C-Myc around the phosphorylation site of Ser62:PL(p-S)PS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed: Product Detail:	PubMed
	The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that play a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. Mutations, overexpression, rearrangement and translocation of this gene have been associated with a variety of hematopoietic tumors, leukemias and lymphomas, including Burkitt lymphoma. There is evidence to show that alternative translation initiations from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site result in the production of two isoforms with distinct N-termini. The synthesis of non-AUG initiate protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene. [provided by RefSeq, Jul 2008].
	<b>Function:</b> 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 t activate the transcription of growth-related genes.
	Subunit: Efficient DNA binding requires dimerization with another bHLH protein. Binds DNA as a heterodimer with MAX. Interacts with TAF1C and SPAG9. Interacts with PARP10. Interacts with KDM5A and KDM5B. Interacts (when phosphorylated at Thr- 58 and Ser-62) with FBXW7. Interacts with PIM2 (By similarity). Interacts with NO66
	Subcellular Location:
	Nucleus, nucleoplasm. Nucleus, nucleolus.
	Post-translational modifications:
	Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is require for ubiquitination and degradation by the proteasome. Phosphorylation at Ser-329 by PIM2 leads to the stabilization of MYC (By similarity). Phosphorylation at Ser-62 by CDK2 prevents Ras-induced senescence.
	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.
	<b>DISEASE:</b> 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.

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

SWISS: P01106

**Gene ID:** 4609

Database links:

Entrez Gene: 4609Human

Entrez Gene: 17869Mouse

Entrez Gene: 24577Rat

<u>Omim: 19008</u>0Human

SwissProt: P01106Human

SwissProt: P01108Mouse

SwissProt: P09416Rat

Unigene: 202453Human

Unigene: 2444Mouse

Unigene: 12072Rat

## Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

