



## Rabbit Anti-phospho-C-Myc (Thr58) antibody

SL23391R

<b>Product Name:</b>	phospho-C-Myc (Thr58)
<b>Chinese Name:</b>	磷酸化致癌基因C-Myc抗体
<b>Alias:</b>	Myc(Phospho-Thr58); Myc(Phospho-T58); p-Myc(Thr58); p-Myc(T58); 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.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	49kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human C-Myc around the phosphorylation site of Thr58:LP(p-T)PP
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays 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 initiated protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene. [provided by RefSeq, Jul 2008].</p> <p><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 to activate the transcription of growth-related genes.</p> <p><b>Subunit:</b> 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.</p> <p><b>Subcellular Location:</b> Nucleus, nucleoplasm. Nucleus, nucleolus.</p> <p><b>Post-translational modifications:</b> Phosphorylated by PRKDC. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required 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.</p> <p><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</p>

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.

**Similarity:**

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

**SWISS:**

P01106

**Gene ID:**

4609

**Database links:**

[Entrez Gene: 4609](#)Human

[Entrez Gene: 17869](#)Mouse

[Entrez Gene: 24577](#)Rat

[Omim: 190080](#)Human

[SwissProt: P01106](#)Human

[SwissProt: P01108](#)Mouse

[SwissProt: P09416](#)Rat

[Unigene: 202453](#)Human

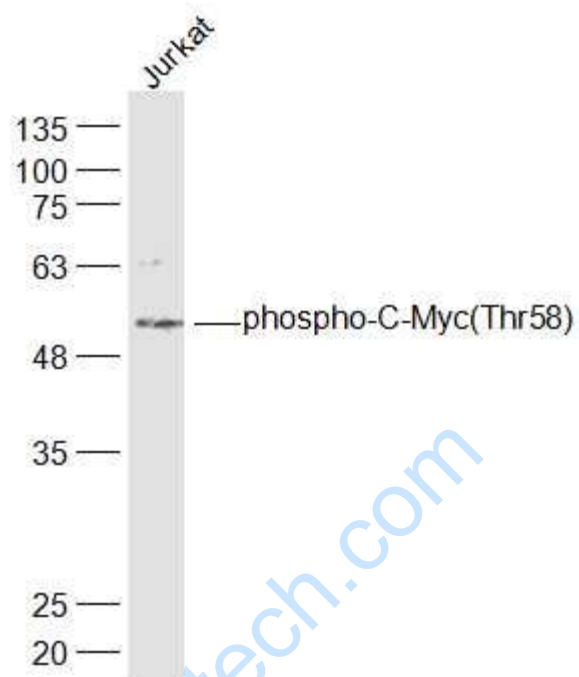
[Unigene: 2444](#)Mouse

[Unigene: 12072](#)Rat

**Important Note:**

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

Picture:



Sample:

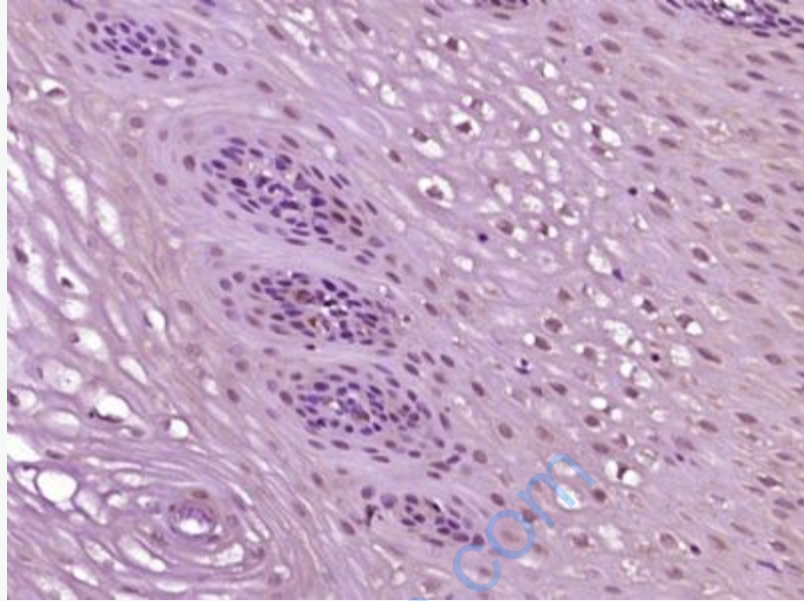
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti-phospho-C-Myc(Thr58) (SL23391R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD

Observed band size: 49 kD



Paraformaldehyde-fixed, paraffin embedded (Human esophageal carcinoma);  
Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block  
endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer  
(normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-C-  
Myc(Thr58)) Polyclonal Antibody, Unconjugated (SL23391R) at 1:400 overnight at  
4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and  
DAB staining.