



Rabbit Anti-phospho-C-Myc (Ser373) antibody

SL8442R

Product Name:	phospho-C-Myc (Ser373)
Chinese Name:	磷酸化致癌基因C-Myc抗体
Alias:	Myc(Phospho-Ser373); Myc(Phospho-S373); p-Myc(Ser373); p-Myc(S373); 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
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1µg/Test 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 Ser373:KR(p-S)F
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:	PubMed
Product Detail:	<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>Function: 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>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.</p> <p>Subcellular Location: Nucleus, nucleoplasm. Nucleus, nucleolus.</p> <p>Post-translational modifications: 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>DISEASE: 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.</p>

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

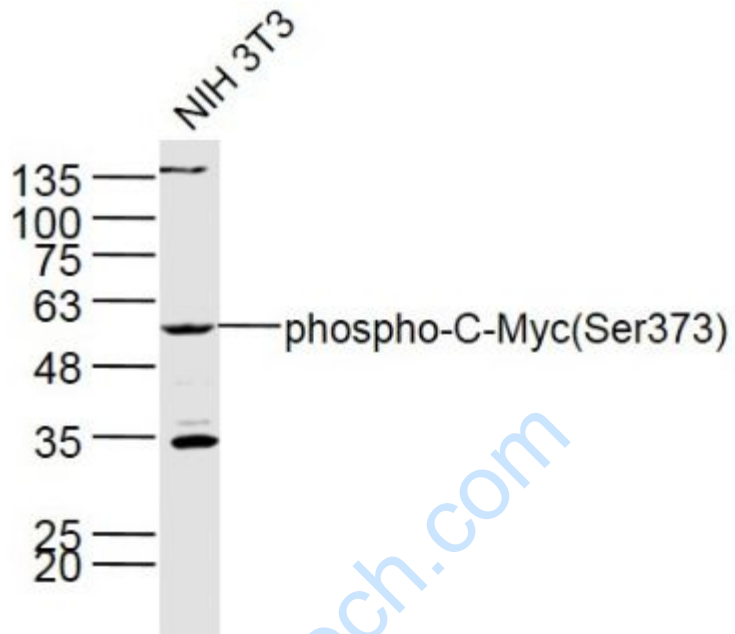
[Unigene: 2444](#) Mouse

[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:

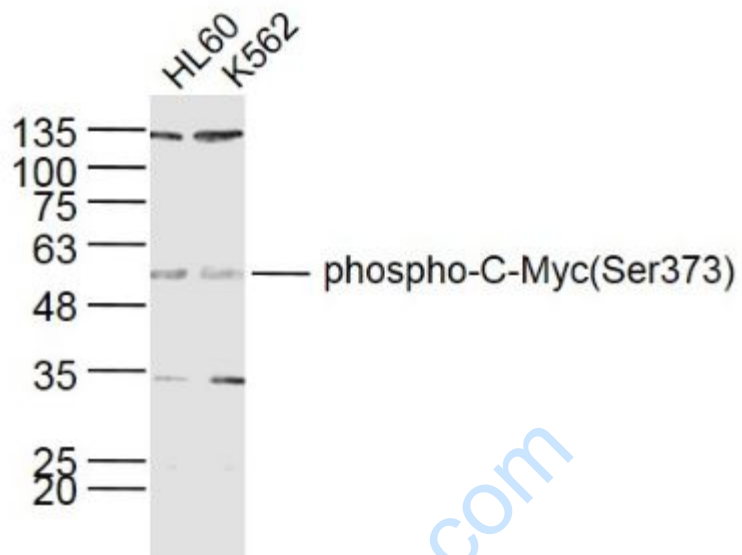
NIH-3T3 (Mouse) Lysate at 30 ug

Primary: Anti- phospho-C-Myc(Ser373) (SL8442R) at 1/300 dilution

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

Predicted band size: 49 kD

Observed band size: 54 kD



Sample:

HL60 (Human) Lysate at 30 ug

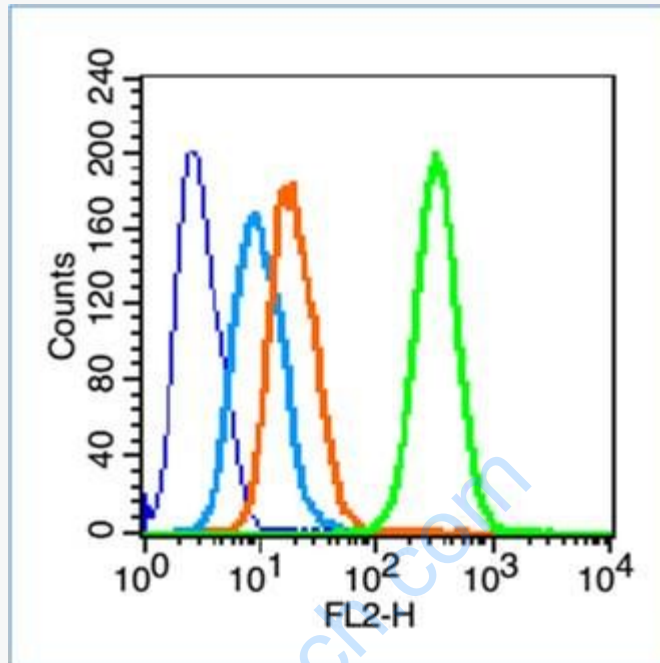
K562 (Human) Lysate at 30 ug

Primary: Anti- phospho-C-Myc(Ser373) (SL8442R) at 1/300 dilution

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

Predicted band size: 49 kD

Observed band size: 54 kD



Blank control (blue line): HeLa cells (fixed with 70% methanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C).

Primary Antibody (green line): Rabbit Anti-phospho-C-Myc(Thr373) antibody (SL8442R), Dilution: 0.2 μg / 10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1 μg / test.