

## c-Myc (phospho Thr58) Polyclonal Antibody

Catalog No: YP0069

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;IP;ELISA

Target: c-Myc

**Fields:** >>MAPK signaling pathway;>>ErbB signaling pathway;>>Cell cycle;>>PI3K-Akt

signaling pathway;>>Cellular senescence;>>Wnt signaling pathway;>>TGF-beta signaling pathway;>>Hippo signaling pathway;>>Signaling pathways regulating pluripotency of stem cells;>>JAK-STAT signaling pathway;>>Thyroid hormone signaling pathway;>>Salmonella infection;>>Hepatitis C;>>Hepatitis B;>>Human cytomegalovirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi

sarcoma-associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Proteoglycans in cancer;>>MicroRNAs in cancer;>>Chemical carcinogenesis - receptor activation;>>Colorectal cancer;>>Endometrial

cancer;>>Thyroid cancer;>>Bladder cancer;>>Chronic myeloid

leukemia;>>Acute myeloid leukemia;>>Small cell lung cancer;>>Breast cancer;>>Hepatocellular carcinoma;>>Gastric cancer;>>Central carbon

metabolism in cancer

Gene Name: MYC

Protein Name: Myc proto-oncogene protein

P01106

P01108

Human Gene Id: 4609

**Human Swiss Prot** 

No:

Mouse Gene Id: 17869

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24577

Rat Swiss Prot No: P09416

1/4



**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Myc around the phosphorylation site of Thr58. AA range:25-74

**Specificity:** Phospho-c-Myc (T58) Polyclonal Antibody detects endogenous levels of c-Myc

protein only when phosphorylated at T58.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. Immunoprecipitation: 2-5 ug:mg lysate.

ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band:** 50,(also ~60KD in some samples)

Cell Pathway: Stem cell pathway; Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA; WNT;WNT-T

CELL; \( \beta\)-Catenin; \( \text{ErbB/HER}; \text{MAPK\_ERK\_Growth; MAPK\_G\_Protein; PI3K/Akt; } \)

Protein\_Acetylation

**Background:** 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],

**Function:** disease: 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.,disease:Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors.,function:Participates in the regulation of gene transcription. Binds DNA both in a non-specific manner and also specifically to recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-

related genes., online information: Myc entry, PTM: Phosphorylated by

PRKDC., similarity: Contains 1 basic helix-loop-helix (bHLH)

domain.,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.,

Subcellular Location :

Nucleus, nucleoplasm . Nucleus, nucleolus .

**Expression:** Cervix, Epithelium, Leukemia, Placenta, Promyelocytic I

Tag: orthogonal,ip

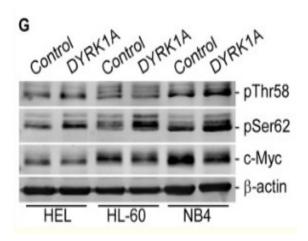
**Sort :** 431

No4:

Host: Rabbit

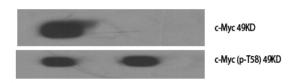
**Modifications:** Phospho

## **Products Images**



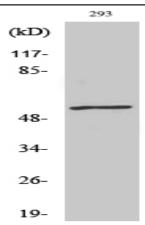
Liu, Qiang, et al. "Tumor suppressor DYRK1A effects on proliferation and chemoresistance of AML cells by downregulating c-Myc." PloS one 9.6 (2014): e98853.

Western Blot analysis of various cells using Phospho-c-Myc (T58) Polyclonal Antibody diluted at 1:500

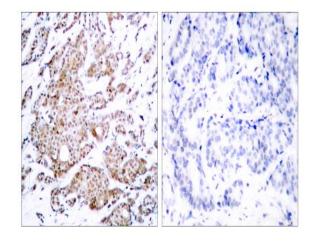


- + - phospho-peptide

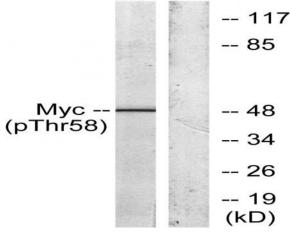
+ non-phospho-peptide



Western Blot analysis of 293 cells using Phospho-c-Myc (T58) Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Myc (Phospho-Thr58) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from ovary cancer, using Myc (Phospho-Thr58) Antibody. The lane on the right is blocked with the phospho peptide.