

## c-Myc (PT0228R) PT® Rabbit mAb

Catalog No: YM8143

**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 BHLHE39

Protein Name: Myc proto-oncogene protein (Class E basic helix-loop-helix protein 39)

(bHLHe39) (Proto-oncogene c-Myc) (Transcription factor p64)

Human Gene Id: 4609

Human Swiss Prot P01106

No:

Mouse Gene Id: 17869

Mouse Swiss Prot

No:

Rat Gene ld: 24577

Rat Swiss Prot No: P09416

P01108

1/4

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:200-1000,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP

1:50-200

Purification: Protein A

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

Molecularweight: 48kD

Observed Band: 60kD

**Background:** v-myc avian myelocytomatosis viral oncogene homolog(MYC) Homo sapiens

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

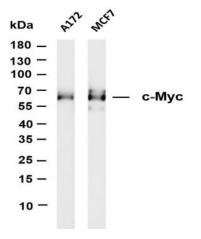
SPAG9. Interacts with PARP10. Interacts with KDM5A and KDM5B.,

Subcellular Location:

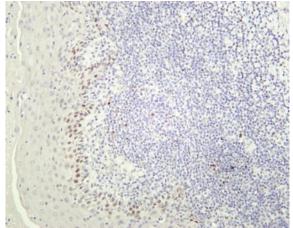
Nucleus



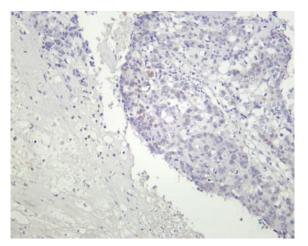
## **Products Images**



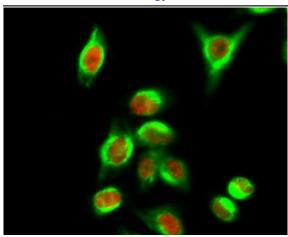
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-c-Myc (PT0228R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A172 Lane 2: MCF7 Predicted band size: 48kDa Observed band size: 60kDa



Human tonsil was stained with Anti-c-Myc (PT0228R) rabbit antibody



Human lung was stained with Anti-c-Myc (PT0228R) rabbit antibody



Immunofluorescence analysis of Hela cell. 1,c-Myc Antibody(red) was diluted at 1:200(4° overnight). CYCS Monoclonal Antibody(4B10)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).