**Product Name:** **KD-Validated MYC Recombinant Rabbit Monoclonal Antibody**
**Catalog #:** **KVAb01724**
For research use only.

## Summary

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|---|---|
| **Description** | KO&KD-Validated antibody |
| **Host** | Rabbit |
| **Application** | WB,FCM,ICC,IHC-P |
| **Reactivity** | Human,M |
| **Conjugation** | Unconjugated |
| **Modification** | Unmodified |
| **Isotype** | Rabbit IgG |
| **Clonality** | Rabbit mAb |
| **Form** | Liquid |
| **Storage** | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| **Shipping** | Ice bags |
| **Buffer** | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide. |
| **Purification** | Affinity purification |

## Application

| | |
|---|---|
| **Dilution Ratio** | WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| **Molecular Weight** | Calculated MW: 48.8kDa |

## Antigen Information

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|---|---|
| **Gene Name** | MYC |
| **Alternative Names** | MYC; MYC Proto-Oncogene, BHLH Transcription Factor; BHLHe39; C-Myc; MYCC; V-Myc Avian Myelocytomatosis Viral Oncogene Homolog; Class E Basic Helix-Loop-Helix Protein 39; Myc Proto-Oncogene Protein; Transcription Factor P64; Proto-Oncogene C-Myc; Myc-Related Translation/Localization Regulatory Factor; Avian Myelocytomatosis Viral Oncogene Homolog; V-Myc Myelocytomatosis Viral Oncogene Homolog; BHLHE39; MRTL |
| **Gene ID** | 4609.0 |
| **SwissProt ID** | P01106 |
| **Immunogen** | A synthesized peptide derived from human c-Myc |

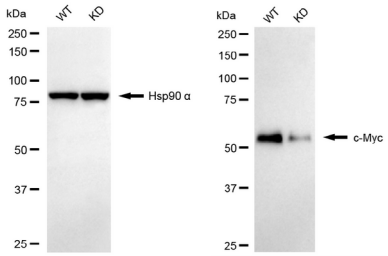
## Background

This gene is a proto-oncogene and encodes a nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. The encoded protein forms a heterodimer with the related transcription factor MAX. This complex binds to the E box DNA consensus sequence and regulates the transcription of specific target genes. Amplification of this gene is frequently observed in numerous human cancers. Translocations involving this gene are associated with Burkitt lymphoma and multiple myeloma in human patients. There is evidence to show that translation initiates both from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site, resulting in the production of two isoforms with distinct N-termini. [provided by RefSeq, Aug 2017]

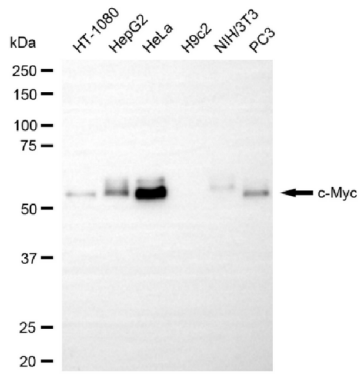
## Research Area

Epigenetics and Nuclear Signaling,Stem Cells,Cancer,Signal Transduction

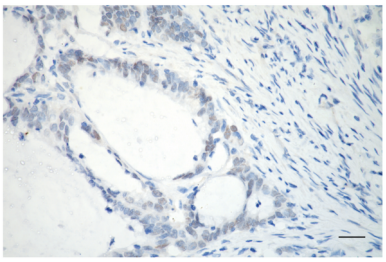
## Image Data



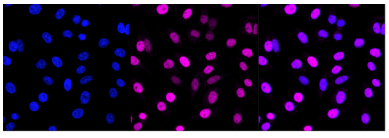

Western blotting analysis using c-Myc antibody (KVAb01724). c-Myc expression in wild type (WT) and MYC knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with c-Myc antibody (KVAb01724, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



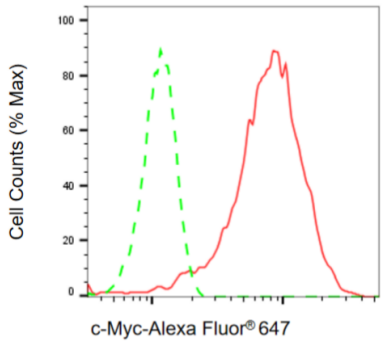

Western blotting analysis using c-Myc antibody (KVAb01724). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with c-Myc antibody (KVAb01724, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using c-Myc antibody (KVAb01724, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with c-Myc antibody (KVAb01724, 1:1,000). Nuclei were stained blue with DAPI; c-Myc was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.




Flow cytometric analysis of c-Myc expression in HepG2 cells using c-Myc antibody (KVAb01724, 1:2,000). Green, isotype control; red, c-Myc.