

**Phospho c-Myc (pT58/S62) Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog # 1203-1

Clone ID: E203 Lot #: *Please refer to vial*
Quantity: 100 µl
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: Human Mouse Rat
Applications: WB IHC ICC Flow Cytometry IP
Molecular Wt.: 57 - 70 kDa
UniProt ID: P01106

Background: Oncogene-encoded proteins c-Myc, N-Myc, and L-Myc function in cell proliferation, differentiation and neoplastic disease. Amplification of the c-Myc gene has been found in several types of human tumors, the N-Myc gene in neuroblastomas (1), and the L-Myc gene in human small cell lung carcinomas (2). c-Myc protein is a transcription factor localized to the nucleus of the cell. It seems to be involved in activating the transcription of growth-related genes. c-Myc binds to DNA during transcription as a heterodimeric complex with Max. c-Myc is phosphorylated in vitro by p44/42 MAP kinase at Ser62 (3) and in vivo at both Thr58 and Ser62. Mutation of Thr58 and Ser62 to Ala inhibits the ability of c-Myc to activate transcription (3).

Specificity: A synthetic phospho-peptide corresponding to residues surrounding Thr58 and Ser62 of human C-Myc was used as immunogen. The antibody only detects c-Myc phosphorylated on Threonine 58 and Serine 62. Predicted to cross-react with most species, based on sequence homology.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:1,000 - 10,000
ICC: 1: 50-100
IP: 1:100

Background References:

1. Nisen, P.D. et al. Enhanced expression of the N-myc gene in Wilms' tumors. *Cancer Res.* 46: 6217-6222 (1986).
2. Nau, M.N. et al. L-myc, a new myc-related gene amplified and expressed in human small cell lung cancer. *Nature* 318: 69-73 (1985).
3. Gupta, S. et al. Transactivation of Gene Expression by Myc is Inhibited by Mutation at the Phosphorylation Sites Thr-58 and Ser-62. *Proc. Natl. Acad. Sci. USA* 90: 3216-3220 (1993).

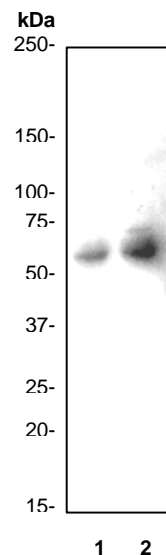


Fig 1. Western blot analysis on A431 cell lysate using anti-Phospho-c-Myc (T58/S62) RabMab (catalog #1203-1), dilution 1:1,000. Cell lysates were either (1) untreated or (2) treated with TPA.

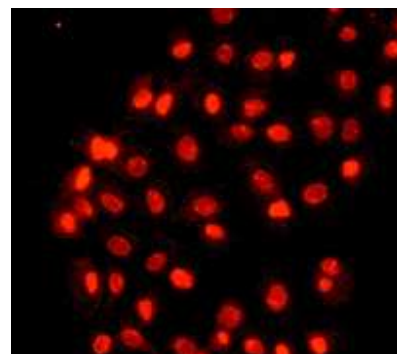


Fig 2. Immunofluorescent staining of A4321 cells using anti-phospho-c-Myc (T58/S62) RabMab (catalog #1203-1).

Product QC'd by: _____

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit www.epitomics.com.

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