c-Myc/N-Myc (D3N8F) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC, FC-FP, ChIP,	HMRMk	Endogenous	57-65	Rabbit IgG	#P04198, #P01106	4613, 4609
ChIP-seq, C&R						

Product Usage Information

For optimal ChIP and ChIP-seq results, use 10 μ I of antibody and 10 μ g of chromatin (approximately 4 x 10⁶ cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

The CUT&RUN dilution was determined using CUT&RUN Assay Kit #86652.

Application	Dilution	
Western Blotting	1:1000	
Immunofluorescence (Immunocytochemistry)	1:1600	
Flow Cytometry (Fixed/Permeabilized)	1:400	
Chromatin IP	1:50	
Chromatin IP-seq	1:50	
CUT&RUN	1:50	

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than

0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #83277.

Specificity / Sensitivity

c-Myc/N-Myc (D3N8F) Rabbit mAb recognizes endogenous levels of total c-Myc and N-Myc proteins.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to a central region within human c-Myc protein.

Background

Members of the Myc/Max/Mad network function as transcriptional regulators with roles in various aspects of cell behavior, including proliferation, differentiation, and apoptosis (1). These proteins share a common basic-helix-loop-helix leucine zipper (bHLH-ZIP) motif required for dimerization and DNA-binding. Max was originally discovered based on its ability to associate with c-Myc and found to be required for the ability of Myc to bind DNA and activate transcription (2). Subsequently, Max has been viewed as a central component of the transcriptional network, forming homodimers as well as heterodimers with other members of the Myc and Mad families (1). The association between Max and either Myc or Mad can have opposing effects on transcriptional regulation and cell behavior (1). The Mad family consists of four related proteins; Mad1, Mad2 (Mxi1), Mad3, and Mad4, and the more distantly related members of the bHLH-ZIP family, Mnt and Mga. Like Myc, the Mad proteins are tightly regulated with short half-lives. In general, Mad family members interfere with Myc-mediated processes, such as proliferation, transformation, and prevention of apoptosis by inhibiting transcription (3,4).

Background References

- 1. Baudino, T.A. and Cleveland, J.L. (2001) Mol Cell Biol 21, 691-702.
- 2. Blackwood, E.M. and Eisenman, R.N. (1991) $\it Science$ 251, 1211-7.
- 3. Henriksson, M. and Lüscher, B. (1996) Adv Cancer Res 68, 109-82.
- 4. Grandori, C. et al. (2000) Annu Rev Cell Dev Biol 16, 653-99.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

c-Myc/N-Myc (D3N8F) Rabbit mAb (#13987) Datasheet Without Images Cell Signaling Technology

WB: Western Blotting IF-IC: Immunofluorescence (Immunocytochemistry)

FC-FP: Flow Cytometry (Fixed/Permeabilized) ChIP: Chromatin IP ChIP-seq: Chromatin IP-seq

C&R: CUT&RUN

Cross-Reactivity Key

 $\textbf{H:} \ \text{human} \ \textbf{M:} \ \text{mouse} \ \textbf{R:} \ \text{rat} \ \textbf{Hm:} \ \text{hamster} \ \textbf{Mk:} \ \text{monkey} \ \textbf{Vir:} \ \text{virus} \ \textbf{Mi:} \ \text{mink} \ \textbf{C:} \ \text{chicken} \ \textbf{Dm:} \ \textbf{D.} \ \text{melanogaster}$

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

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