



# p-Max (Tyr 123): sc-130198

## BACKGROUND

It is now well established that the nature and relative abundance of individual subunits of different classes of transcription factors can positively or negatively regulate levels of gene expression. Myc proteins homodimerize and bind DNA poorly, if at all, at physiological levels. Max is a nuclear localized bHLH-Zip protein initially identified by screening a B cell expression library with the bHLH-Zip region of c-Myc. Max homodimers and the Myc-Max heterodimers bind the sequence CACGTG; however the binding of the heterodimeric complex is stronger than the Max homodimer. The Max gene products have been identified as (Max) and (Max 9) proteins that differ by a 9 amino acid insertion N-terminal to the basic region. In contrast to Myc, which is highly regulated during progression through the cell cycle, Max is highly stable and is much more abundant than Myc. Two members of the bHLH-Zip protein family, designated Mad and Mxi1, homodimerize poorly but form heterodimeric complexes with Max that have opposing functions to Myc-Max heterodimers, with respect to regulation of gene expression. Human Max may be phosphorylated on Tyr 123.

## REFERENCES

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4. Prendergast, G.C., Lawe, D. and Ziff, E.B. 1991. Association of Myn, the murine homolog of Max, with c-Myc stimulates methylation-sensitive DNA binding and Ras cotransformation. *Cell* 65: 395-407.
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## CHROMOSOMAL LOCATION

Genetic locus: MAX (human) mapping to 14q23.3.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

p-Max (Tyr 123) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Tyr 123 of Max of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

p-Max (Tyr 123) is recommended for detection of Tyr 123 phosphorylated Max of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Max siRNA (h): sc-38079, Max shRNA Plasmid (h): sc-38079-SH and Max shRNA (h) Lentiviral Particles: sc-38079-V.

Molecular Weight of p-Max: 26 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml)

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.