



## Mad 4 (1-209): sc-4330 WB

### BACKGROUND

It is now well established that Myc regulation of cell proliferation and differentiation involves a family of related transcription factors. One such factor, Max, is an obligate heterodimeric partner for Myc and can also form heterodimers with at least four related proteins designated Mad 1, Mxi 1 (alternatively designated Mad 2), Mad 3 and Mad 4. Like Mad 1 and Mxi 1, association of Mad 3 and Mad 4 with Max results in transcriptional repression. Both Myc and the Mad proteins have short half-lives and their synthesis is tightly regulated, while Max expression is constitutive and relatively stable. Two related mammalian cDNAs have been identified and shown to encode Mad-binding proteins. Both possess sequence homology with the yeast transcription repressor Sin3, including four conserved paired amphipathic helix (PAH) domains. mSin3A and mSin3B specifically interact with the Mad proteins via their second paired amphipathic helix domain (PAH2). It has been suggested that Mad-Max heterodimers repress transcription by tethering mSin3 to DNA as corepressors.

### REFERENCES

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### SOURCE

Mad 4 (1-209) is expressed in *E. coli* as a 50 kDa tagged fusion protein corresponding to amino acids 1-209 of Mad 4 of mouse origin.

### STORAGE

Store at -20° C; stable for one year from the date of shipment.

### PRODUCT

Mad 4 (1-209) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

### APPLICATIONS

Mad 4 (1-209) is suitable as a Western blotting control for sc-771 and sc-1221.

### RESEARCH USE

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