

Dmp1 (DMTF5I250): sc-81249

BACKGROUND

The highly leukemogenic avian retrovirus E26 contains two oncogenes, v-Myb and v-Ets, which are expressed together as a fusion protein. The cellular homolog of v-Myb, designated c-Myb, encodes a transcription factor. Deletion or disruption of a negative regulatory domain mapping within the carboxy terminus of c-Myb results in enhanced transactivating capacity and in parallel, leads to activation of its ability to transform hemopoietic cells. c-Myb is expressed preferentially, but not exclusively, in immature hemopoietic cells and its expression decreases as cells differentiate. A second member of the Myb proto-oncogene family, B-Myb, encodes another sequence-specific DNA binding protein. Studies suggest that B-Myb expression rescues cells from p53-induced G₁ arrest mediated by p21. Dmp1 (also designated cyclin D binding Myb-like transcription factor 1) has also been identified as a Myb-like transcription factor. It contains three tandem Myb repeats and has been shown to be a substrate for cyclin D-dependent kinases.

REFERENCES

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- Lin, D., et al. 1994. Constitutive expression of B-Myb can bypass p53-induced Waf1/Cip1-mediated G₁ arrest. *Proc. Natl. Acad. Sci. USA* 91: 10079-10083.
- Mallakin, A., et al. 2006. Expression of Dmp1 in specific differentiated, nonproliferating cells and its regulation by E2Fs. *Oncogene* 25: 7703-7713.
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CHROMOSOMAL LOCATION

Genetic locus: DMTF1 (human) mapping to 7q21.12.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

SOURCE

Dmp1 (DMTF5I250) is a mouse monoclonal antibody raised against a recombinant protein fragment corresponding to an internal region of Dmp1 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

Dmp1 (DMTF5I250) is recommended for detection of Dmp1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

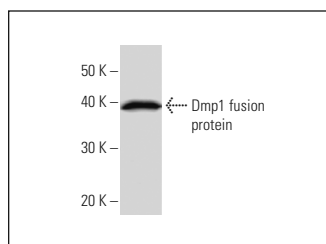
Suitable for use as control antibody for Dmp1 siRNA (h): sc-38068, Dmp1 shRNA Plasmid (h): sc-38068-SH and Dmp1 shRNA (h) Lentiviral Particles: sc-38068-V.

Molecular Weight of Dmp1: 84 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Dmp1 (DMTF5I250): sc-81249. Western Blot analysis of human recombinant Dmp1 fusion protein.

SELECT PRODUCT CITATIONS

- Wang, Y., et al. 2022. MicroRNA-196a-5p overexpression in Wharton's jelly umbilical cord stem cells promotes their osteogenic differentiation and new bone formation in bone defects in the rat calvarium. *Cell Tissue Res.* E-published.

RESEARCH USE

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