

Myogenin D1. Mouse Monoclonal Antibody 5.2F , Human, Mouse, Rat, Chicken

BACKGROUND

Recognizes a phosphoprotein of 45kDa, identified as MyoD1. The epitope of this antibody maps in between amino acid 3-56 in the N-terminus of mouse MyoD1 protein. It does not cross react with myogenin, Myf5, or Myf6. Antibody to MyoD1 labels the nuclei of myoblasts in developing muscle tissues. MyoD1 is not detected in normal adult tissue, but is highly expressed in the tumor cell nuclei of rhabdomyosarcomas. Occasionally nuclear expression of MyoD1 is seen in ectomesenchymoma and a subset of Wilm's tumors. Weak cytoplasmic staining is observed in several non-muscle tissues, including glandular epithelium and also in rhabdomyosarcomas, neuroblastomas, Ewing's sarcomas and alveolar soft part sarcomas.

ORDERING INFORMATION

CATALOG NUMBER
X1414M

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Mouse Clone 5.2F

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG2a

APPLICATIONS
ELISA, Western Blot, Immunoprecipitation, Immunohistochemistry (Frozen and Paraffn Sections), Immunofluorescence

IMMUNOGEN

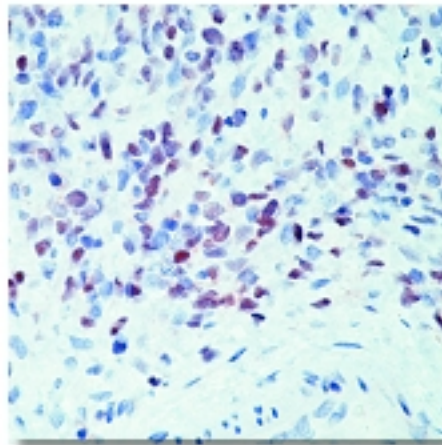
Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with recombinant mouse MyoD1 protein and mouse myeloma Sp2/0-Ag14 cells.

SPECIES REACTIVITY

Human, Mouse, Rat, Chicken

Legend:

Immunohistochemical staining using MyoD1 antibody on formalin fixed, paraffin embedded human rhabdomyosarcoma.



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Rhabdomyosarcoma

COMMENTS

This antibody can be used for electron microscopy, ELISA, immunofluorescence, immunoprecipitation (2 µg/mg of protein lysate), Western blotting (1 µg/ml) and immunohistochemistry on frozen and formalin/paraffin fixed tissues (2-4 µg/ml). Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Thulasi R; et al. Alpha 2a-interferon-induced differentiation of human alveolar rhabdomyosarcoma cells: correlation with down-regulation of the insulin-like growth factor type I receptor. *Cell Growth and Differentiation*, 1996 Apr, 7(4):531-41.
2. Wesche WA; et al. Immunohistochemistry of MyoD1 in adult pleomorphic soft tissue sarcomas. *American Journal of Surgical Pathology*, 1995, 19(3):261-9.
3. Parham DM; et al. Immunohistochemical analysis of the distribution of MyoD1 in muscle biopsies of primary myopathies and neurogenic atrophy. *Acta Neuropathologica*, 1994, 87:605-11.
4. Tallini G; et al. Myogenic regulatory protein expression in adult soft tissue sarcomas. A sensitive and specific marker of skeletal muscle differentiation. *American Journal of Pathology*, 1994 Apr, 144 (4):693-701.
5. Dias P; et al. Monoclonal antibodies to the myogenic regulatory protein MyoD1: epitope mapping and diagnostic utility. *Cancer Research*, 1992 Dec 1, 52(23):6431-9.
6. Rosai J; et al. MyoD1 protein expression in alveolar soft part sarcoma as confirmatory evidence of its skeletal muscle nature. *American Journal of Surgical Pathology*, 1991 Oct, 15(10):974-81.

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