

Myo D1 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX50120

Clone# BP6124

Predicted Molecular Wt: 35kDa
Species Cross-reactivity: Human
Applications: IHC-P

Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P15172

Background:

MyoD1, one of the MyoD family of myogenic helix-loop-helix transcription factors, combined with myogenin, plays a role in coordinating the myogenic differentiation pathway from the determination of mesodermal precursors into myoblasts, the differentiation of myoblasts into myotubes, and finally the maturation of myotubes into skeletal myofibers. Normal mature skeletal muscle does not express MyoD1 protein. MyoD1 is expressed in myoblasts before differentiation while myogenin has post-differentiation functions. Anti-MyoD1 immunostaining identifies cells committed to myogenesis in their earliest phase, thus, it is a better biomarker for less differentiated Rhabdomyosarcomas (RMS).

RMS are the most frequent malignant soft tissue neoplasms of childhood. While better differentiated RMS have cross-striations or rhabdomyoblasts that allow for a confident morphologic diagnosis, less differentiated RMS resemble other small blue round-cell tumors.

Studies suggest, anti-MyoD1 may be used together with anti-myogenin and anti-desmin as a panel of markers since any RMS is virtually never negative for all three markers simultaneously.

Subcellular location:

Nucleus

Recommended method:

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

Immunogen:

Synthetic peptide corresponding to residues within aa1-100 of Human Myo D1 was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C

Storage instructions:

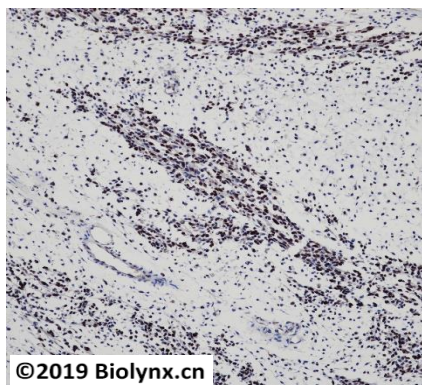
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

IHC-P: 1:100-1:200

Background References:

1. Farup J et al. J Appl Physiol (1985) 119:1053-63 (2015).
2. Hoedt A et al. J Physiol 594:727-43 (2016).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rhabdomyosarcomas tissue labelling Myo D1 with BP6124. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0

Product QC'd by: 

For research use only. Not for use in diagnostic or therapeutic applications.