

## Recombinant MyoD1 (Rhabdomyosarcoma Marker) Antibody

Rabbit Monoclonal Antibody [Clone MYOD1/3418R]

Catalog No	Format	Size
4654-RBM8-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4654-RBM8-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4654-RBM8-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

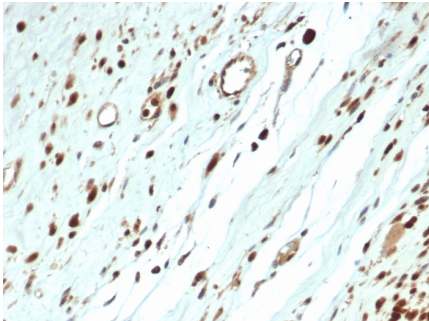
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

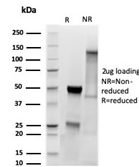
<b>Clone</b>	MYOD1/3418R
<b>Gene Name</b>	MYOD1
<b>Immunogen</b>	Recombinant fragment (around aa1-100) of human MyoD1 protein (exact sequence is proprietary)
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG / Kappa
<b>Mol. Weight of Antigen</b>	45kDa
<b>Cellular Localization</b>	Nucleus
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Human fetal skeletal muscle or rhabdomyosarcoma.

\*Optimal dilution for a specific application should be determined.

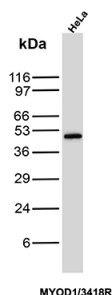
### Product Images for Recombinant MyoD1 (Rhabdomyosarcoma Marker) Antibody



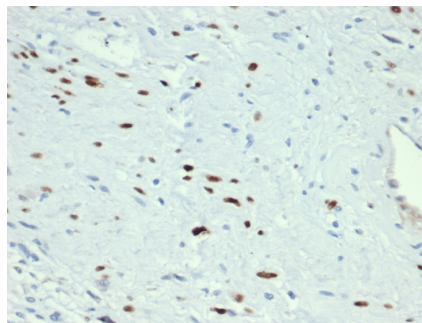
Formalin-fixed, paraffin-embedded human rhabdomyosarcoma stained with MyoD1 Recombinant Rabbit Monoclonal Antibody (MYOD1/3418R) at 2ug/ml in PBS. HIER: Tris/EDTA pH9.0; 95°C/45min. 2°CAb: HRP-Poly:30min. DAB:5min.



SDS-PAGE Analysis of Purified MyoD1 Recombinant Rabbit Monoclonal Antibody (MYOD1/3418R). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of HeLa cell lysate using MYOD1 Recombinant Rabbit Monoclonal Antibody (MYOD1/3418R).



Formalin-fixed, paraffin-embedded human rhabdomyosarcoma stained with MyoD1 Recombinant Rabbit Monoclonal Antibody (MYOD1/3418R) at 2 µg/ml in PBS. HIER: Tris/EDTA pH9.0; 95°C/45min. 2°CAB: HRP-Poly:30min. DAB:5min.

### Specificity & Comments

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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200 µg/ml of Ab purified by Protein A Column. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiovascular, Developmental Biology, Mesenchymal Stem Cell Differentiation, Nuclear Marker