

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MyoD in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 474515
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MyoD Glu77-Gly215 Accession # P15172
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

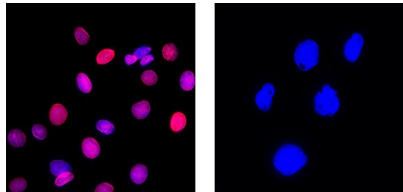
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	8-25 µg/mL	fixed C2C12 mouse myoblast cell line (Positive) and absent in RD cells (Negative)

## DATA

**Immunocytochemistry**



C2C12 (Positive) cells      RD (Negative) cells

**Detection of MyoD in C2C12 Mouse Cell Line and Rd.** MyoD was detected in fixed C2C12 mouse myoblast cell line (Positive) and absent in RD cells (Negative) using Mouse Anti-Human MyoD Monoclonal Antibody (Catalog # MAB5966) at 25 µg/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to the nucleus. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

MyoD (myoblast determination protein 1), also called Myf-3 (myogenic factor 3) is an ~44 kDa nuclear protein in the MyoD family of muscle-specific bHLH transcription factors. MyoD family members heterodimerize with E proteins and cooperate with MEF2 family transcription factors to regulate expression of skeletal muscle-specific genes. MyoD is essential for skeletal muscle differentiation. Acetylation at lysines 99, 102 and 104 further regulates its activity. Human MyoD shares 96% amino acid identity with mouse and rat MyoD over the sequence used as the immunogen.