

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Myogenin in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 671037
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Myogenin Ser124-Asn224 Accession # P15173
<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.

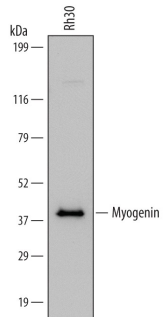
## APPLICATIONS

**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>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

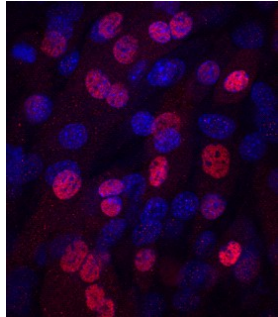
## DATA

**Western Blot**



**Detection of Human Myogenin by Western Blot.** Western blot shows lysates of Rh30 human rhabdomyosarcoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Myogenin Monoclonal Antibody (Catalog # MAB66861) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Myogenin at approximately 39 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

**Immunocytochemistry**



**Myogenin in C2C12 Mouse Cell Line.** Myogenin was detected in immersion fixed differentiated C2C12 mouse myoblast cell line using Mouse Anti-Human Myogenin Monoclonal Antibody (Catalog # MAB66861) at 10 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 nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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

Myogenin, also called MYF4, is a 34 kDa, 224 amino acid (aa) basic-HLH transcription factor member of the myogenic regulatory factor (MRF) family. It induces fibroblastic differentiation to myoblasts and is expressed most highly early in the skeletal muscle differentiation process. Within the region used as an immunogen, human myogenin shares 93% and 91% aa identity with mouse and rat myogenin, respectively. Isoforms may exist that diverge at aa 155 (246 aa form) or that are truncated at aa 215.