

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects recombinant human MYF-5 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MYF-5 Met1-Leu255 Accession # P13349
<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 as a 0.2 µm filtered solution in PBS.

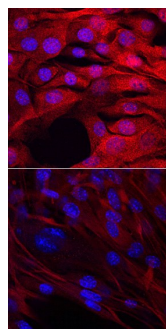
## APPLICATIONS

**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>	5-15 µg/mL	See Below

## DATA

### Immunocytochemistry



**MYF-5 in C2C12 Mouse Cell Line.** MYF-5 was detected in immersion fixed C2C12 mouse myoblast cell line undifferentiated (upper panel) or differentiated with horse serum for 7 days (lower panel) using Goat Anti-Human/Mouse MYF-5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4027) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<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

MYF-5 (Myogenic factor 5; also bHLHc2) is a 37-39 kDa transcriptional activator that belongs to the bHLH superfamily of myogenic regulatory factors. It is found in embryonic skeletal muscle progenitors and neurons, and is induced by SHH and Wnt1. Expression of MYF-5 protein prompts nonmuscle cells to adopt a muscle precursor phenotype. Notably, neurons appear to block MYF-5 accumulation, thus preserving their unique phenotype. MYF-5 forms heterodimers with multiple molecules. When complexed to I-mfa, MYF-5 is retained in the cytoplasm and is inactive; when complexed to E12, MYF-5 is transcriptionally active. Phosphorylation regulates MYF-5 stability. Human MYF-5 is 255 amino acids (aa) in length. It contains one myogenic basic region (aa 1-83) followed by an HLH motif (aa 96-135). Full-length human MYF-5 (aa 1-255) shares 89% aa sequence identity with mouse MYF-5.