

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human MYF-5 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 593128
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MYF-5 Met1-Leu255 Accession # P13349
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	C2C12 mouse myoblast cell line fixed with paraformaldehyde and permeabilized with saponin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

MYF-5 (Myogenic Factor 5), also known as 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.

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