

Human/Mouse MYF-5 Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 593128

Catalog Number: IC4027G 100 µg

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	E. coli-derived recombinant human MYF-5 Met1-Leu255 Accession # P13349		
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

DATA

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	See Below

Detection of MYF-5 in C2C12 Mouse Cell Line by Flow Cytometry C2C12 mouse myoblast cell line was stained with Mouse Anti-Human/Mouse MYF-5 Alexa Fluor® 488-conjugated Monoclonal Antibody (Catalog # IC4027G, filled histogram) or isotype control antibody (Catalog # IC003G, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules

PREPARATION AND STORAGE

ShippingThe product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage

Protect from light. Do not freeze.

104

MYF-5

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.

PRODUCT SPECIFIC NOTICES

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Rev. 2/7/2018 Page 1 of 1

