

Human Myosin Heavy Chain Fluorescein-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # MF20

Catalog Number: IC4470F 100 TESTS

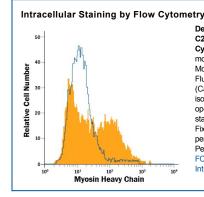
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects Myosin Heavy Chain in human, mouse, rat and other mammalian, avian, and amphibian species.		
Source	Monoclonal Mouse IgG _{2B} Clone # MF20		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Chicken pectoralis-derived Myosin		
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)		
Formulation	Supplied 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	10 μL/10 ⁶ cells	See Below

DATA



Detection of Myosin Heavy Chain in C2C12 Mouse Cell Line by Flow Cytometry. Three-day differentiated C2C12 mouse myoblast cell line was stained with Mouse Anti-Human Myosin Heavy Chain Fluorescein-conjugated Monoclonal Antibody (Catalog # IC4470F, filled histogram) or isotype control antibody (Catalog # IC0041F, 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

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.

12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Skeletal muscle Myosin or myosin II is the motor protein that generates force to drive muscle contraction. It is a 520 kDa hexamer comprised of two heavy chains and four light chains. Myosin heavy chain is 220 kDa in size and consists of a long coiled-coil domain tail that mediates dimerization of the two heavy chains and a globular head region that mediates ATP-dependent sliding of actin filaments. Myosin heavy chain can be proteolytically cleaved to produce heavy meromyosin, which includes the S1 motor domain (head region) and first third of the coiled coil domain, and light meromyosin, which includes the C-terminal two thirds of the coiled coil domain.

