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Anti-Myosin 4/MyHC-IIB (C-terminus) Antibody

Catalog # AN1847

Product Information

Application	WB
Primary Accession	Q5SX39
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	222859

Additional Information

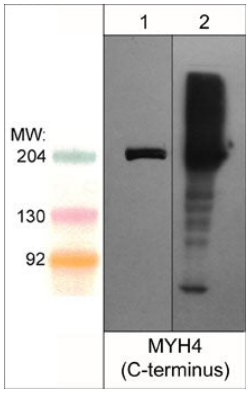
Gene ID	17884
Other Names	Myh4, myosin Iib, myHC-2b; myosin heavy chain 4; MHC2B; Myhsf; MYH2B; AI506973; MyHC IIb
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Myosin 4/MyHC-IIB (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

Non-muscle myosin II is an actin-based motor protein essential to cell motility, cell division, migration, adhesion and polarity. This myosin forms a hexameric complex comprised of two heavy chains (NMHC-II), two essential light chains, and two regulatory light chains (RLC). In vertebrates, there are three NMHC-II isoforms (NMHC-IIA, NMHC-IIB, and NMHC-IIC), which exhibit distinct patterns of expression in cells and tissues. Regulation of NMHC-II activity occurs through RLC and HC phosphorylation. RLCs are phosphorylated at Thr-18 and Ser-19, leading to activation of myosin II motor activity and increased myosin filament stability. By contrast, PKC phosphorylation of Ser-1/Ser-2 and Thr-9 in RLC may decrease activated myosin II interaction with actin. NMHC-II phosphorylation may be an important mode for regulating myosin-II assembly. PKC phosphorylates NMHC-IIA on Ser-1916 in the C-terminal region and NMHC-IIB on multiple serines in the tailpiece. Casein kinase II phosphorylates NMHC-IIA on Ser-1943 in the tailpiece and increases disassembly of NMHC-IIA filaments.

Images

Western blot analysis MYH4 in mouse C2C12 (lane 1) and mouse extraocular muscle (lane 2). Both lanes of the blot were probed with rabbit polyclonal anti-MYH4/MyHC-IIB



(C-terminus) at 1:1000.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.