

**Anti-Myosin 4/MyHC-IIB (C-terminus) Antibody**  
**Catalog # AN1847****Specification****Anti-Myosin 4/MyHC-IIB (C-terminus) Antibody - Product Information**

Primary Accession	<a href="#">Q5SX39</a>
Reactivity	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Rabbit Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>222859</b>

**Anti-Myosin 4/MyHC-IIB (C-terminus) Antibody - Additional Information**Gene ID **17884****Other Names**

Myh4, myosin lib, myHC-2b; myosin heavy chain 4; MHC2B; Myhsf; MYH2B; AI506973; MyHC IIB

**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.

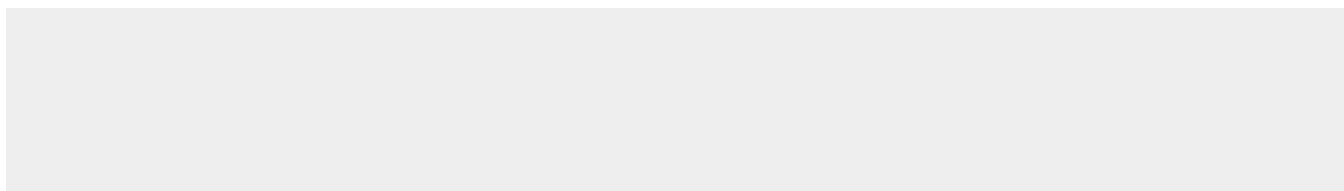
**Shipping**

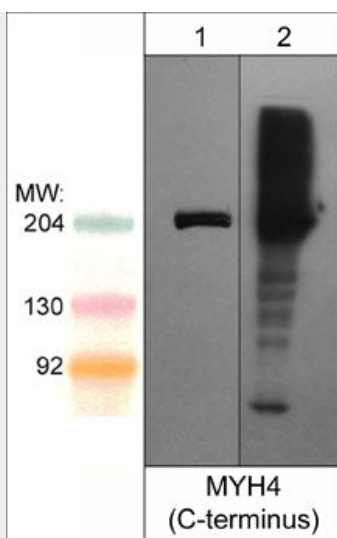
Blue Ice

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

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

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