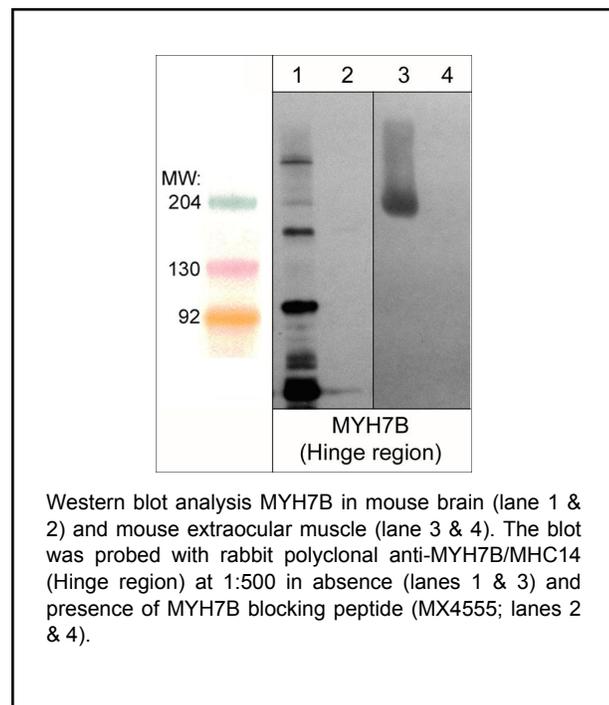


### Background

Myosin is a highly conserved, ubiquitous protein found in all eukaryotic cells, where it provides the motor function for diverse movements such as cytokinesis, phagocytosis, and muscle contraction. All myosins contain an amino-terminal motor/head domain and a carboxy-terminal tail domain. The class II myosins consist of the conventional two-headed myosins that form filaments and are composed of two myosin heavy chain (MYH) subunits and four myosin light chain subunits. There are 15 MYH genes identified as Class II myosins and these include six skeletal muscle MYHs (MYH1, MYH2, MYH3, MYH4, MYH8, MYH13), three cardiac MYHs (MYH6, MYH7, MYH7B) and two non-muscle MYHs (MYH9, MYH10), as well as a smooth muscle MYH (MYH11).

### Background References

Berg, J.S. et al. (2001) *Mol Biol Cell*. 12:780.  
Rossi, A.C. et al. (2009) *J Physiol*. 588(Pt 2):353.  
Rubio, M.D., et al. (2011) *J Neurosci*. 31(4):1448.



### Applications

Blocking 1:1000  
ELISA 50 ng/well

End user should determine optimal dilution for their particular applications and experiments.  
Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

### Specificity

The peptide is specifically recognized by anti-MYH7B/MHC14 (Hinge region) antibody (MP4551) in ELISA, and has been shown to block the reactivity of MP4551 during Western blot. In addition, the peptide is recommended for use in blocking MP4551 reactivity in immunocytochemistry.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

### Peptide Sequence

A synthetic peptide corresponding to amino acid residues in the hinge region from mouse MYH7B/MHC14. This sequence is highly conserved in rat and human MYH7B, and has less than 50% identity with other MYH family members.

### Buffer and Storage

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.  
Store at -20°C. Stable for 1 year.

### Related Products

MK6370 Myosin IIA Heavy Chain Phospho-Regulation Antibody Sampler Kit  
MP4541 Myosin 4/MyHC-IIB (C-terminus) Rabbit Polyclonal  
MP4551 Myosin 7B/MHC14 (Hinge region) Rabbit Polyclonal  
MP4561 Myosin 13/Extraocular Myosin (C-terminal region) Rabbit Polyclonal  
MP4571 Myosin 13/Extraocular Myosin (Hinge region) Rabbit Polyclonal

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