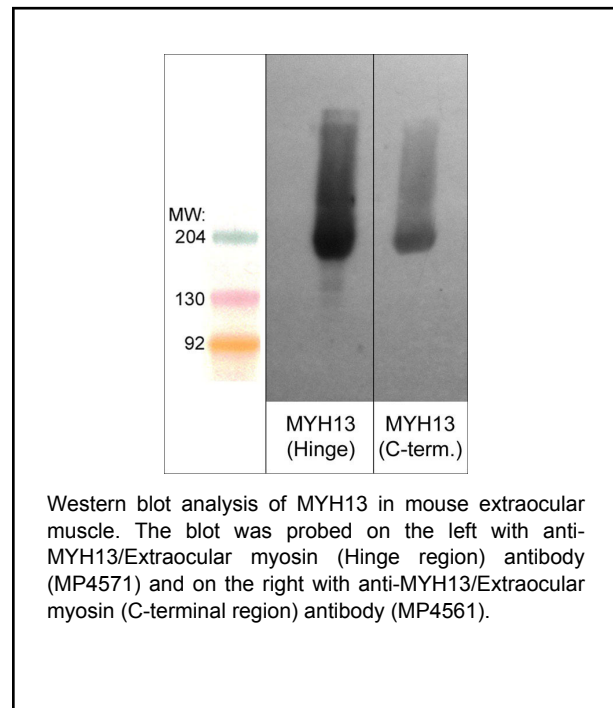


Background

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.
 Briggs, M.M. & Schachat, F. (2002). *J Exp. Biol.* 205:3133.
 Moncman, C.L. et al. (2011) *Invest Ophthalmol Vis Sci.* 52(7):3962.

Applications

WB	1:1000
ELISA	1:2000
IHC	1:50

Species Reactivity

Hu, Rt, Ms

Specificity

This antibody was affinity purified using MYH13 (C-terminal region) peptide (without carrier). The antibody detects a 215 kDa* protein corresponding to the apparent molecular mass of MYH13 on SDS-PAGE immunoblots of mouse extraocular muscle, and does not detect MYHs in mouse diaphragm, gastrocnemius, or brain.

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.

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

Immunogen

Uniprot ID: B1AR69

A synthetic peptide (coupled to KLH) corresponding to amino acid residues in the hinge region from mouse MYH13/extraocular myosin. This sequence has 100% identity with rat and human MYH13, and has low homology to other myosin family members.

Buffer and Storage

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, 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
- MK6490 Myosin Light Chain Phospho-Regulation Antibody Sampler Kit

Product References

- Mead, AF et al. (2017) *Elife.* 6. pii: e29425.
 IHC: bat extraocular muscle

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