MYH2 Antibody / Myosin heavy chain 2 [clone 32M67] (FY12576)

Catalog No.	Formulation	Size
FY12576	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	32M67
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9UKX2
Applications	Western blot: 1:500-1:2000
Limitations	This MYH2 antibody is available for research use only.

Description

MYH2 antibody detects myosin heavy chain 2, encoded by the MYH2 gene. MYH2 is a skeletal muscle myosin isoform expressed in type IIa fast oxidative fibers. Myosin heavy chains are motor proteins that convert ATP hydrolysis into mechanical force, driving actin-based muscle contraction. MYH2 provides intermediate contractile velocity and fatigue resistance, making it a key determinant of muscle performance.

MYH2 antibody is widely applied in muscle physiology, pathology, and developmental biology research. Detection of MYH2 expression distinguishes type IIa fibers from other fiber types, supporting studies of muscle composition and plasticity. In clinical research, MYH2 expression patterns are examined in muscular dystrophy, myopathies, and age-related sarcopenia. By detecting MYH2, researchers can assess muscle adaptation to exercise, disease, and therapeutic interventions.

Western blot assays detect MYH2 protein in skeletal muscle extracts. Immunohistochemistry maps MYH2 distribution within muscle cross sections, enabling identification of fiber type composition. Immunofluorescence highlights sarcomeric localization, providing high-resolution visualization of contractile architecture.

MYH2 mutations cause autosomal dominant myopathy characterized by progressive muscle weakness, abnormal fiber morphology, and impaired contractility. Detection with MYH2 antibody supports genetic and pathological studies of this disease. Additionally, MYH2 is a marker of regenerative fibers and is used to study developmental myogenesis. By applying MYH2 antibody, scientists can investigate both physiological and pathological aspects of skeletal muscle biology.

Beyond skeletal muscle, MYH2 research contributes to understanding of biomechanics, metabolic regulation, and aging. Differences in MYH2 expression across individuals and conditions reflect muscle plasticity and adaptation. The antibody therefore provides a critical reagent for both basic science and translational studies in muscle biology.

MYH2 antibody from NSJ Bioreagents offers dependable specificity for detecting type IIa myosin heavy chain, supporting high-quality studies of skeletal muscle physiology and disease.

Application Notes

Optimal dilution of the MYH2 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human MYH2 was used as the immunogen for the MYH2 antibody.

Storage

Store the MYH2 antibody at -20oC.

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