

Datasheet for 600-401-959

Myosin 1G Antibody

Overview

Description:	Anti-Myosin 1G (RABBIT) Antibody - 600-401-959
Item No.:	600-401-959
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. In general, myosins are protein complexes consisting of one or more myosin heavy chains, associated light chains and other proteins. Myosins function as molecular motors and use the energy of ATP hydrolysis to move actin filaments or to move vesicles or other cargo on fixed actin filaments. Myosins have magnesium-ATPase activity and bind actin. Myosins can be divided into classes that are distinguished based on sequence features of the motor, or head domain, but also have distinct tail regions that are believed to bind specific cargoes. Unconventional myosins exist. Myosin 1G is an unconventional myosin that is restricted to hematopoietic cells. Unconventional myosins are also critical for motility in amoeba and a mammalian paralog (Myo1C) is critical as a glucose transporter that recycles glucose in response to insulin.
Synonyms:	rabbit anti-Myosin 1G antibody, Unconventional myosin-Ig, Minor histocompatibility antigen HA-2, mHag HA-2, MYO1G
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MYO1G
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-terminal region of human Myosin 1G protein.
Purity/Specificity:	This affinity-purified antibody is directed against human Myosin 1G protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with Myosin 1G from human, mouse, chimpanzee and rat based on 100% homology with the immunizing sequence. Cross reactivity with Myosin 1G from other sources has not been determined.
Relevant Links:	• NCBI - 239582755 • UniProtKB - B0I1T2 • GeneID - 64005

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity-purified antibody has been tested for use in ELISA, western blotting and possibly in immunoprecipitation as well. Specific conditions for reactivity should be optimized by the end user. By western blot a band approximately 100 kDa in size corresponding to Myosin 1G protein is expected in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IP:	1:100
WB:	1:500 - 1:3,000

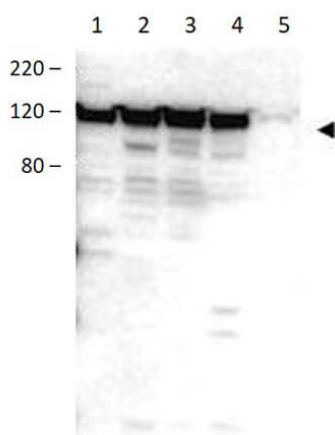
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.2 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western blot using Rockland's affinity purified anti-Myosin 1G antibody. Lane 1: Jurkat cell lysates (p/n W09-001-370) [+]. Lane 2: peripheral blood T cell lysates [+]. Lane 3: human spleen lysates [+]. Lane 4: 300.19 cell lysates [+]. Lane 5: 293 cell lysates (p/n W09-000-365) [-]. Shows detection of a band ~100kDa in size corresponding to Myosin 1G (arrowhead) in Myosin 1G positive whole cell lysates. Personal Communication. Stephen Shaw, NCI, Bethesda, MD.

References

- Olety B et al. Myosin 1G (Myo1G) is a haematopoietic specific myosin that localises to the plasma membrane and regulates cell elasticity. *FEBS Lett.* (2010)

Disclaimer

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