

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human α -Cardiac Actin in direct ELISAs. Detects human, mouse, and rat α -Cardiac Actin in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 959615
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human α -Cardiac Actin Asp3-Phe377 Accession # P68032
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Actin, alpha cardiac muscle 1 (ACTC1) is a 377 aa cytoskeletal filament in cardiac muscle which interacts with the 50-KDa domain of the myosin motor domain in cardiac muscle contraction. Actin is highly conserved across species, and differs from skeletal muscle actin (ACTA1) by only four amino acids. Mutations in the ACTC1 gene are linked to familial hypertrophy cardiomyopathy, atrial septal defects, arrhythmia, and chronic inflammatory cardiomyopathy.

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