

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MYH7 in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 940906
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human MYH7 synthetic peptide Accession # P12883
<b>Conjugate</b>	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

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

## BACKGROUND

MYH7 encodes the beta myosin heavy chain (MHC-β) which is a component of cardiac muscle myosin mainly expressed in the ventricle of fetal heart and represents the minority myosin in the adult heart. This is the 'slow form' of cardiac myosin as opposed to the 'fast form' (MYH6, aka MHC-α) expressed more predominantly in the atria of the fetal heart and is the predominant myosin in the adult heart. The two isoforms of cardiac MHCα and β display 93% homology but have significantly different enzymatic properties, with α having 150-300% the contractile velocity and 60-70% actin attachment time as that of β. Several mutations in MYH7 have been associated with inherited cardiomyopathies paraspinal and proximal muscle atrophy. MYH7 is a 223 kDa protein composed of 1935 amino acids.

## PRODUCT SPECIFIC NOTICES

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