



Anti-MYH7 (aa 1-109) polyclonal antibody (DPAB-DC1980)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Muscle myosin is a hexameric protein containing 2 heavy chain subunits, 2 alkali light chain subunits, and 2 regulatory light chain subunits. This gene encodes the beta (or slow) heavy chain subunit of cardiac myosin. It is expressed predominantly in normal human ventricle. It is also expressed in skeletal muscle tissues rich in slow-twitch type I muscle fibers. Changes in the relative abundance of this protein and the alpha (or fast) heavy subunit of cardiac myosin correlate with the contractile velocity of cardiac muscle. Its expression is also altered during thyroid hormone depletion and hemodynamic overloading. Mutations in this gene are associated with familial hypertrophic cardiomyopathy, myosin storage myopathy, dilated cardiomyopathy, and Laing early-onset distal myopathy.
Immunogen	MYH7 (NP_000248, 1 a.a. ~ 109 a.a) partial recombinant protein with GST tag. The sequence is MGDSEMAVFGAAAPYLRKSEKERLEAQTRPFDLKKDVFVPDDKQEFVKAKIVSREGGKVTAETEYGKTVTVKEDQVMQQNPPKFDKIEDMAMLTFLHEPAVLYNLKDRY
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	MYH7 myosin, heavy chain 7, cardiac muscle, beta [Homo sapiens (human)]
Official Symbol	MYH7
Synonyms	MYH7; myosin, heavy chain 7, cardiac muscle, beta; CMH1; MPD1; SPMD; SPMM; CMD1S; MYHCB; myosin-7; myHC-beta; myhc-slow; myopathy, distal 1; myosin heavy chain slow isoform; rhabdomyosarcoma antigen MU-RMS-40.7A; myosin heavy chain, cardiac muscle beta isoform; myosin, heavy polypeptide 7, cardiac muscle, beta;
Entrez Gene ID	4625
Protein Refseq	NP_000248
UniProt ID	P12883
Chromosome Location	14q12
Pathway	Adrenergic signaling in cardiomyocytes; Dilated cardiomyopathy; Membrane Trafficking; Translocation of GLUT4 to the plasma membrane
Function	ATP binding; ATPase activity; actin binding; actin-dependent ATPase activity