

# Immunotag™ MYL3 Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM0459
Product Description	Immunotag™ MYL3 Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MYL3
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of MYL3 expressed in E. Coli.
Specificity	MYL3 Monoclonal Antibody detects endogenous levels of MYL3 protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	MYL3
Accession No.	P08590 P09542
Alternate Names	MYL3; Myosin light chain 3; Cardiac myosin light chain 1; CMLC1; Myosin light chain 1; slow-twitch muscle B/ventricular isoform; MLC1SB; Ventricular/slow twitch myosin alkali light chain
Description	myosin light chain 3(MYL3) Homo sapiens MYL3 encodes myosin light chain 3, an alkali light chain also referred to in the literature as both the ventricular isoform and the slow skeletal muscle isoform. Mutations in MYL3 have been identified as a cause of mid-left ventricular chamber type hypertrophic cardiomyopathy. [provided by RefSeq, Jul 2008],

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Cell Pathway/ Category	Cardiac muscle contraction,Hypertrophic cardiomyopathy (HCM),Dilated cardiomyopathy,
Protein Expression	Heart,Skeletal muscle,
Subcellular Localization	cytosol,muscle myosin complex,myosin complex,sarcomere,A band,I band,
Protein Function	disease:Defects in MYL3 are the cause of cardiomyopathy familial hypertrophic type 8 (CMH8) [MIM:608751]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. CMH8 inheritance can be autosomal dominant or recessive.,disease:Defects in MYL3 are the cause of cardiomyopathy hypertrophic with mid-left ventricular chamber type 1 (MVC1) [MIM:608751]. MVC1 is a very rare variant of familial hypertrophic cardiomyopathy, characterized by mid-left ventricular chamber thickening.,function:Regulatory light chain of myosin. Does not bind calcium.,PTM:The N-terminus is blocked.,similarity:Contains 3 EF-hand domains.,subunit:Myosin is an hexamer of 2 heavy chains and 4 light chains.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.