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# MYL3 Rabbit pAb

Catalog # AP99713

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | P08590 |
| **Other Accession** | P08590 |
| **Reactivity** | Rat, Mouse |
| **Predicted** | Pig, Human, Rabbit, Chicken, Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 21932 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human MLC/Myosin light chain 3 |
| **Epitope Specificity** | 101-195/195 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Contains 3 EF-hand domains. |
| **SUBUNIT** | Myosin is a hexamer of 2 heavy chains and 4 light chains. |
| **Post-translational modifications** | The N-terminus is blocked. N-terminus is methylated by METTL11A/NTM1. |
| **DISEASE** | Cardiomyopathy, familial hypertrophic 8 (CMH8)[MIM:608751]: 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. Rarely, patients present a variant of familial hypertrophic cardiomyopathy, characterized by mid-left ventricular chamber thickening. Note=The disease is caused by mutations affecting the gene represented in this entry. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Myosin is the major component of thick muscle filaments, and is a long asymmetric molecule containing a globular head and a long tail. The molecule consists of two heavy chains each ~200,000 daltons, and four light chains each ~16,000 - 21,000 daltons. Activation of smooth and cardiac muscle primarily involves pathways which increase calcium and myosin phosphorylation resulting in contraction. Myosin light chain phosphatase acts to regulate muscle contraction by dephosphorylating activated myosin light chain. Human myosin light chain has clinical application as a cardiac marker. |

## Additional Information

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| **Gene ID** | 4634 |
| **Other Names** | CMH8; MLC-lV/sb; MLC1SB; MLC1V; VLC1; VLCl; MLC1s; Mylc; MLClV; Mylc1v; rVMLC1; MYL3_HUMAN; MYL3; Cardiac myosin light chain 1 (CMLC1); Myosin light chain 1, slow-twitch muscle B/ventricular isoform (MLC1SB); Ventricular myosin alkali light chain; Ventricular myosin light chain 1 (VLCl); Ventricular/slow twitch myosin alkali light chain (MLC-lV/sb); MYL3_MOUSE; Myosin alkali light chain 1, ventricular/slow skeletal muscle isoform; MYL3_RAT; Myosin alkali light chain 1, ventricular (MLClV); Ventricular myosin light chain 1 (rVMLC1); myosin light chain 3; myosin, light polypeptide 3, alkali; ventricular, skeletal, slow; myosin, light chain 3, alkali |
| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | MYL3 ( HGNC:7584) |
| **Function** | Regulatory light chain of myosin. Does not bind calcium. |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.