Synaptic Systems

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# MLC-2V

**Cat.No. 310 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)**

## Data Sheet

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|---|---|
| Reconstitution/ Storage | 50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl $H_2O$ to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. |
| Applications | **WB**: 1 : 1000 (AP staining)<br>**IP**: yes<br>**ICC**: yes<br>**IHC**: yes<br>**IHC-P/FFPE**: 1 : 200 |
| Immunogen | Synthetic peptide corresponding to AA 104 to 118 from mouse MLC-2V (UniProt Id: P51667) |
| Reactivity | Reacts with: human (P10916), rat (P08733), mouse (P51667), pig, chicken.<br>Other species not tested yet. |
| Specificity | Specific for MLC-2V, no cross-reactivity to MLC-2A. |
| matching control | 310-1P |

**TO BE USED IN VITRO / FOR RESEARCH ONLY**
**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

During cardiogenesis two major isoforms of **m**yosin **l**ight **c**hain **2** are co-expressed in a tightly regulated manner. **MLC-2V** is only present in the ventricle while MLC-2A is exclusively expressed in the atrium. Knock out studies revealed that the 2A isoform cannot substitute for the 2V variant in the ventricular chamber.
Recently it has been demonstrated that embryonic and adult stem cells can be differentiated into cardiomyocytes which may generate suitable replacements for damaged heart tissue in the future. These antibodies are useful tools to distinguish between ventricle and atrium specific cardiomyocytes.

## Selected References SYSY Antibodies

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A novel 3D label-free monitoring system of hES-derived cardiomyocyte clusters: a step forward to in vitro cardiotoxicity testing.
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## Selected General References

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