



MLC2 (Phospho-Tyr118) Antibody

#58017

Number: 58017

Amount: 100µg/100µl

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

Immunogen: synthetic phosphopeptide corresponding to residues surrounding Tyr118 of human MLC2

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

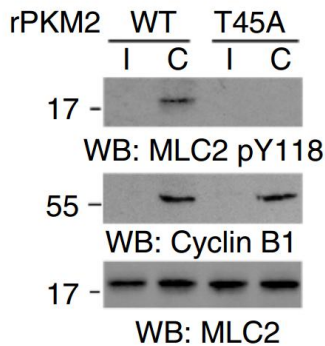
Specificity/Sensitivity: MLC2 (Phospho-Tyr118)antibody detects endogenous levels of MLC2 only when phosphorylated at Tyrosine118 .

Reactivity: Human

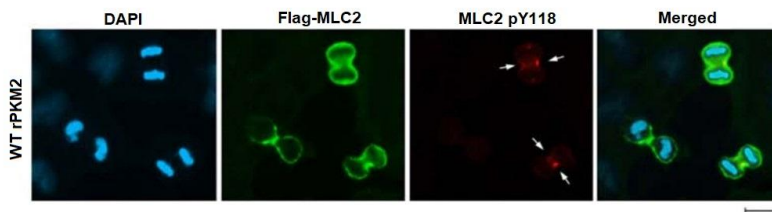
Applications:

Predicted MW: 18KD

WB :1:500~1:1000 IF:1:50-100



U87 cells with PKM2 depletion were stably transfected with a vector expressing WT rPKM2 or rPKM2 T45A. These cells were synchronized by double thymidine block (2 mM) for 43 h and then unreleased or released for 10 h. Immunoblotting analyses were performed with the antibody.



U87 cells with PKM2 depletion were stably transfected with a vector that expressed WT rPKM2. These cells were synchronized by double thymidine block (2 mM) for 43 h and then released for 10 h. Immunofluorescence analyses of cells in cytokinesis were performed using the indicated antibodies. Scale bars, 10 μ m

Background :MLC2 protein can be phosphorylated by PKM2 at Y118, which primes the binding of ROCK2 to MLC2 subsequent ROCK2-dependent MLC2 S15 phosphorylation. PKM2-regulated MLC2 phosphorylation plays a pivotal role in cytokinesis, cell proliferation and brain tumour development [1] .

Reference:1[1] Jiang Y, Wang Y, Wang T, Hawke DH, Zheng Y, Li X, Zhou Q, Majumder S, Bi E, Liu DX, Huang S, Lu Z. PKM2 phosphorylates MLC2 and regulates cytokinesis of tumour cells. *Nat Commun.* 2014 Nov 21; 5:5566. doi: 10.1038/ncomms6566.