



MLC2 (Phospho-Ser15) Antibody

#58018

Number: 58018

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 Ser15 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.

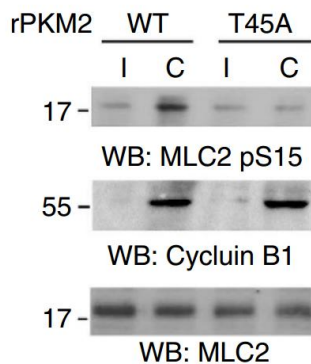
Specificity/Sensitivity: MLC2 (Phospho-Ser15) antibody detects endogenous levels of MLC2 only when phosphorylated at Serine15.

Reactivity: Human

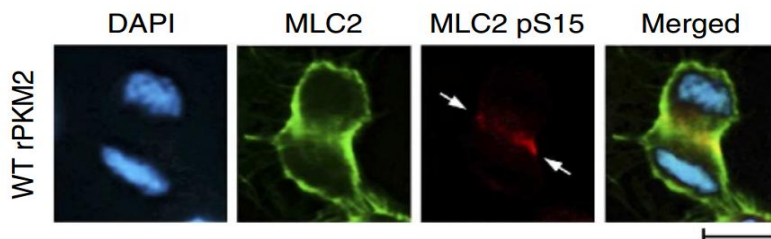
Applications:

Predicted MW: 18KD

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



U87 cells with reconstituted expression of WT rPKM2 or rPKM2 T45A were synchronized by double thymidine block (2 mM) for 43 h, with or without release for 10 h. Immunoblotting analyses were performed with the indicated antibodies.



U87 cells with PKM2 depletion and reconstituted expression of WT rPKM2 were synchronized by double thymidine block (2 mM) for 43 h, with release for 10 h. Immunofluorescence analyses of the cells in cytokinesis were performed using the indicated antibodies. Scale bars, 10

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[] 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.