Bub3 (Phospho-Tyr207) Antibody

#58030

Number: 58030

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℃/1 year

Immunogen: synthetic phosphopeptide corresponding to residues surrounding Tyr207 of human Bub3

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 phospholation site.

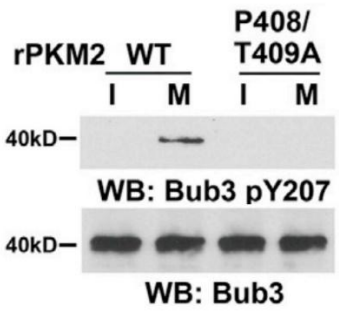
Specificity/Sensitivity: Bub3（Phospho-Tyr207)antibody detects endogenous levels of Bub3 only when phospholated at Tyrosine207 .

Reactivity: Human

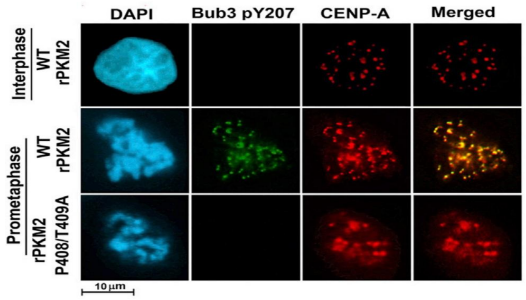
Applications:

Predicted MW: 40KD

WB **:**1:500~1:1000 IHC:1:50-200



HeLa cells with depleted PKM2 and reconstituted expression of WT rPKM2 or rPKM2 P408T409A were synchronized by thymidine double block (2 mM) with or without release for 9 hr.



HeLa cells with PKM2 depletion and reconstituted expression of WT rPKM2 or rPKM2 P408/T409A were stained with the indicated antibodies. The cells in interphase and prometaphase were examined.

Background :PKM2 regulates G1-S phase transition by controlling cyclin D1 expression. PKM2 binds to the spindle checkpoint protein Bub3 during mitosis and phosphorylates Bub3 at Y207. This phosphorylation is required for Bub3-Bub1 complex recruitment to kinetochores, where it interacts with Blinkin and is essential for correct kinetochore-microtubule attachment, mitotic/spindle-assembly checkpoint, accurate chromosome segregation, cell survival and proliferation, and active EGF receptor-induced brain tumorigenesis. In addition, the level of Bub3 Y207 phosphorylation correlated with histone H3-S10 phosphorylation in human glioblastoma specimens and with glioblastoma prognosis [1] .

Reference:[1] HeLa cells with PKM2 depletion and reconstituted expression of WT rPKM2 or rPKM2 P408/T409A were stained with the indicated antibodies. The cells in interphase and prometaphase were examined.