



CHK α 2 (Acetyl-Lys247) Antibody

#58011

Number: 58011

Amount: 100 μ g/100 μ l

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 acetylpeptide corresponding to residues surrounding Lys247 of human CHK α 2

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

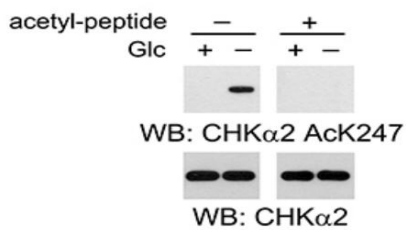
Specificity/Sensitivity: CHK α 2 (Acetyl-Lys247) antibody detects endogenous levels of CHK α 2 only when acetylated at lysine247 .

Reactivity: Human

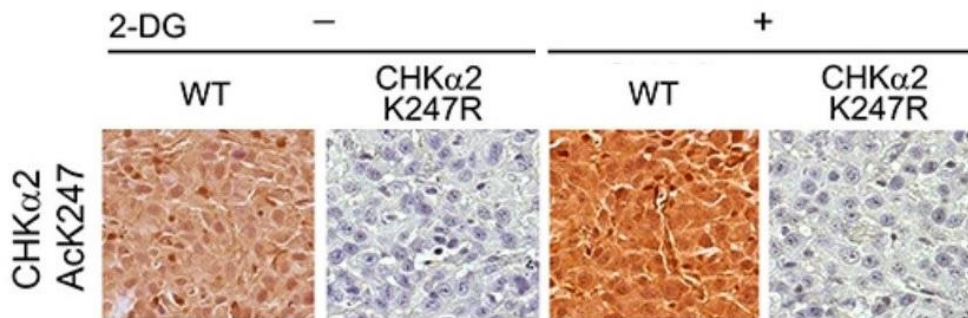
Applications:

Predicted MW: 50KD

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



Huh7 cells were cultured in the presence or absence of glucose for 1 h. Immunoblot analysis was performed in the presence or absence of a CHK α 2 AcK247 acetylation-blocking peptide.



www.swbio.com

Order : order@swbio.com

Technical : tech@swbio.com

U87 cells and U87 cells with knockin expression of CHKa2 K247R were intracranially injected into athymic nude mice. Two weeks after tumor cell injection, 0.2 mL of 2-DG (500 mg/kg) was intraperitoneally injected daily for 14 days. Mouse tumor tissues were stained with the indicated antibodies.

Background :Glucose deprivation induced AMPK-dependent CHK α 2 phosphorylation could induce recruitment of KAT5 for acetylation of CHK α 2 at K247. Acetylation of CHK α 2 disrupted the CHK α 2 dimer and exposed the hydrophobic I186/L187 residues of the helix in the interacting interface of the dimer to bind to lipid droplet protein PLIN2/3. Levels of CHK α 2 K247 acetylation are positively correlated with one another in human glioblastoma specimens and are associated with poor prognosis in glioblastoma patients [1]

Reference:[1] Liu R, Lee JH, Li J, Yu R, Tan L, Xia Y, Zheng Y, Bian XL, Lorenzi PL, Chen Q, Lu Z. Choline kinase alpha 2 acts as a protein kinase to promote lipolysis of lipid droplets. *Mol Cell*. 2021 Jul 1;81(13):2722-2735.e9. doi: 10.1016/j.molcel.2021.05.005.