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IκBα (Phospho-Thr291) Antibody

#58015

Number: 58015

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 Thr291 of human IκBα

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.

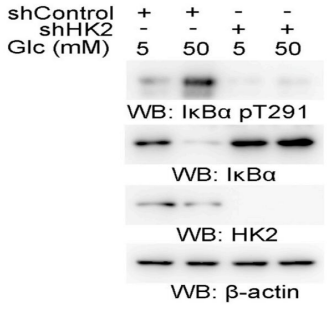
Specificity/Sensitivity: IκBα（Phospho-Thr291)antibody detects endogenous levels of IκBα only when phospholated at Threonine291 .

Reactivity: Human

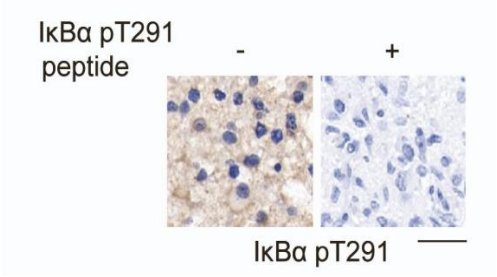
Applications:

Predicted MW: 35KD

WB :1:500~1:1000 IHC:1:100



U251 cells stably expressing HK2 shRNA or a control shRNA were cultured in medium containing the indicated concentrations of glucose for 24 h. Immunoblot analyses were performed with the indicated antibodies.



U87 cells expressing Flag-IκBα were treated with or without high glucose (50 mM) for 12 h. IHC analyses of human glioblastoma samples were performed with an anti-IκBα pT291 antibody in the presence or absence of a blocking peptide for IκBα pT291. Scale bar, 50 μm (bottom).

Background :In human glioblastoma cells, high glucose promotes hexokinase (HK) 2 dissociation from mitochondria and its subsequent binding and phosphorylation of IκBα at T291. Expression of IκBα T291A in glioblastoma cells blocked high glucose-induced PD-L1 expression and promoted CD8+ T cell activation and infiltration into the tumor tissue, reducing brain tumor growth[[1] .

Reference:[1] Guo D, Tong Y, Jiang X, Meng Y, Jiang H, Du L, Wu Q, Li S, Luo S, Li M, Xiao L, He H, He X, Yu Q, Fang J, Lu Z. Aerobic glycolysis promotes tumor immune evasion by hexokinase2-mediated phosphorylation of IκBα. ***Cell Metab.*** 2022 Sep 6;34(9):1312-1324.e6. doi: 10.1016/j.cmet.2022.08.002.