



Beclin1 (Phospho-Ser30) Antibody

#58024

Number: 58024

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 Ser30 of human Beclin1

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.

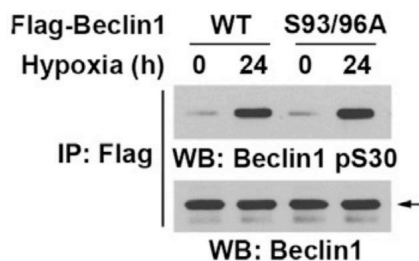
Specificity/Sensitivity: Beclin1 (Phospho-Ser30) antibody detects endogenous levels of Beclin1 only when phosphorylated at Serine30 .

Reactivity: Human

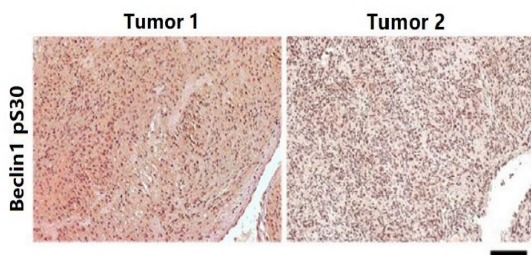
Applications:

Predicted MW: 60KD

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



U87 cells expressing the indicated FLAG-rBeclin1 proteins were treated with or without hypoxia for 24 hr. Immunoprecipitation analyses were performed using the indicated antibodies.



Immunohistochemical staining of human GBM tissues were performed with the indicated antibodies. Scale bar, 200 µm.

Background :Autophagy works as a cellular housekeeper and is crucial for maintaining cell homeostasis. Many cancer cells upregulate autophagy, which is required to support metabolism, tumorigenesis, and resistance to therapy. During the initiation of autophagy, Beclin1 recruits the class III phosphatidylinositol (PI)3-kinase VPS34, to modulate intracellular trafficking and autophagosome formation. PGK1 functioning as a protein kinase phosphorylates Beclin1 at S30. Beclin1 S30 phosphorylation is required for autophagy initiation and tumorigenesis, and the phosphorylation level of Beclin1 S30 correlates with and poor prognosis in glioblastoma patients [1] .

Reference:[1] Qian X, Li X, Cai Q, Zhang C, Yu Q, Jiang Y, Lee JH, Hawke D, Wang Y, Xia Y, Zheng Y, Jiang BH, Liu DX, Jiang T, Lu Z. Phosphoglycerate Kinase 1 Phosphorylates Beclin1 to Induce Autophagy. *Mol Cell*. 2017 Mar 2;65(5):917-931.e6. doi: 10.1016/j.molcel.2017.01.027.