



α -Synuclein (Phospho-Tyr133) Antibody

#11285

Catalog Number: 11285-1, 11285-2

Amount: 50 μ g/50 μ l, 100 μ g/100 μ l

Swiss-Prot No. : P37840

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: The antiserum was produced against synthesized phosphopeptide derived from Human α -Synuclein around the phosphorylation site of tyrosine 133 (E-G-Y_P-Q-D).

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.

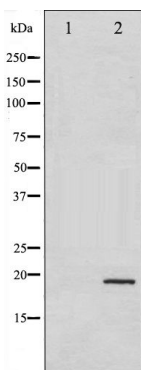
Specificity/Sensitivity: α -Synuclein (phospho-Tyr133) antibody detects endogenous levels of α -Synuclein only when phosphorylated at tyrosine 133.

Reactivity: Human, Mouse, Rat

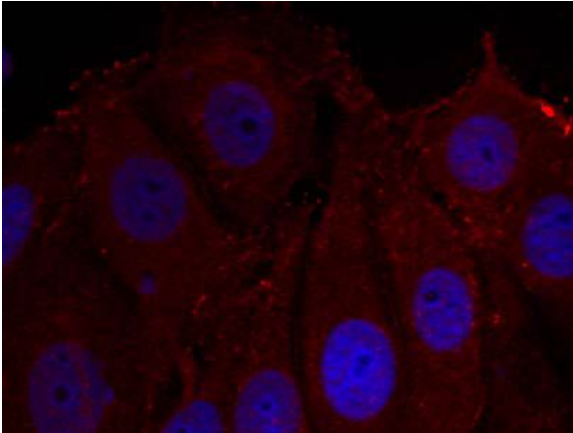
Applications:

Predicted MW: 18 kd

WB : 1:500~1:1000 IF: 1:100~1:200



Western blot analysis of Synuclein- alpha phosphorylation expression in Etoposide treated 293 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence staining of methanol-fixed HeLa cells using α -Synuclein(phospho-Tyr133) antibody (#11285, Red).

Background :

SncA is a member of the synuclein family of structurally related proteins that are prominently expressed in the central nervous system, which also includes beta- and gamma-synuclein. Synucleins are abundantly expressed in the brain and SncA and Snc-Beta inhibit phospholipase D2 selectively. SncA may serve to integrate presynaptic signaling and membrane trafficking. Aggregated SncA proteins form brain lesions that are hallmarks of neurodegenerative synucleinopathies. Defects in SncA play a role in the pathogenesis of Parkinson disease. SncA peptides are a major component of amyloid plaques in the brains of patients with Alzheimer disease. SncA shares 95% sequence homology with rat SncA. Rat SncA is specifically expressed in brain and is associated with synaptosomal membranes in neurons

References:

Kozikowski AP, et al. (2006)ChemMedChem. 1(2):256-66.
Jakowec MW,et al.(2001)Dev Neurosci.23(2):91-9.
El-Agnaf OM,et al.(1998)FEBS Lett. 440(1-2):67-70.