

ARG51742 anti-alpha Synuclein phospho (Tyr125) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha Synuclein phospho (Tyr125)
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha Synuclein
Species	Human
Immunogen	Peptide sequence around phosphorylation site of tyrosine 125 (E-A-Y(p)-E-M) derived from Human α -Synuclein.
Conjugation	Un-conjugated
Alternate Names	Non-A4 component of amyloid precursor; Alpha-synuclein; PARK4; PARK1; PD1; NACP; Non-A beta component of AD amyloid

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 6622 Human](#)

[Swiss-port # P37840 Human](#)

Gene Symbol

SNCA

Gene Full Name

synuclein, alpha (non A4 component of amyloid precursor)

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.

Function

May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation. [UniProt]

Research Area

Neuroscience antibody

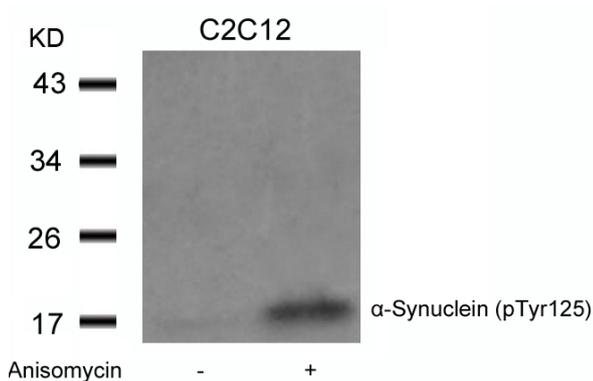
Calculated Mw

14 kDa

PTM

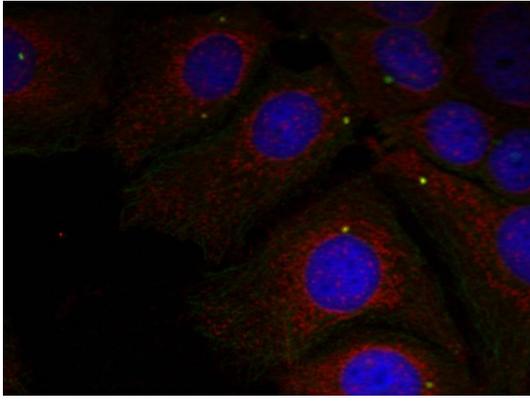
Phosphorylated, predominantly on serine residues. Phosphorylation by CK1 appears to occur on residues distinct from the residue phosphorylated by other kinases. Phosphorylation of Ser-129 is selective and extensive in synucleinopathy lesions. In vitro, phosphorylation at Ser-129 promoted insoluble fibril formation. Phosphorylated on Tyr-125 by a PTK2B-dependent pathway upon osmotic stress. Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers. Ubiquitinated. The predominant conjugate is the diubiquitinated form (By similarity). Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.

Images



ARG51742 anti-alpha Synuclein phospho (Tyr125) antibody WB image

Western blot: Extracts from C2C12 cells untreated or treated with Anisomycin stained with ARG51742 anti-alpha Synuclein phospho (Tyr125) antibody.



ARG51742 anti-alpha Synuclein phospho (Tyr125) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51742 anti-alpha Synuclein phospho (Tyr125) antibody.