

ARG83747 Human alpha Synuclein ELISA Kit

Package: 96 wells
Store at: 4°C, -20°C

Summary

Product Description	ARG83747 Human alpha Synuclein ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human alpha Synuclein in serum, plasma and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	alpha Synuclein
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.31 ng/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	0.63 ng/ml - 40 ng/ml
Sample Volume	100 µl
Alternate Names	Non-A4 component of amyloid precursor; Alpha-synuclein; PARK4; PARK1; PD1; NACP; Non-A beta component of AD amyloid

Application Instructions

Assay Time	3.5 hours
Form	96 well
Storage instruction	Store the kit at 4°C, -20°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	SNCA
Gene Full Name	synuclein, alpha (non A4 component of amyloid precursor)
Background	Alpha-synuclein is a member of the synuclein family, which also includes beta- and gamma-synuclein. Synucleins are abundantly expressed in the brain and alpha- and beta-synuclein inhibit phospholipase D2 selectively. SNCA may serve to integrate presynaptic signaling and membrane trafficking. Defects in SNCA have been implicated in the pathogenesis of Parkinson disease. SNCA peptides are a major component of amyloid plaques in the brains of patients with Alzheimer's disease. Alternatively spliced transcripts encoding different isoforms have been identified for this gene. [provided by RefSeq, Feb 2016]
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]

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.

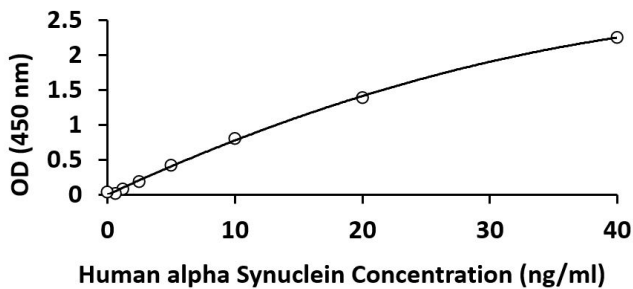
Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers. Ubiquitinated. The predominant conjugate is the diubiquitinated form (By similarity).

Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.

Cellular Localization

Amyloid; Cell projection; Cytoplasm; Membrane; Nucleus; Secreted; Synapse. [UniProt]

Images



ARG83747 Human alpha Synuclein ELISA Kit standard curve image

ARG83747 Human alpha Synuclein ELISA Kit results of a typical standard run with optical density reading at 450 nm.