



# Magic™ Anti-Alpha Synuclein (Phospho S129) polyclonal antibody (CPBT-66762RR)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

This product specifically recognises rat alpha synuclein when phosphorylated at Ser129. Alpha synuclein is a 140 amino acid, 15kDa protein seen predominantly in the neocortex, hippocampus, substantia nigra, thalamus and cerebellum. Its normal cellular function has not been definitively determined, but it is thought to be involved in the regulation of neuronal plasticity, dopamine neurotransmission and other membrane-associated processes at the presynaptic terminal. Alpha synuclein is normally a soluble, unfolded protein, but it can aggregate at high concentrations to form insoluble fibrils which, in association with other proteins such as ubiquitin, neurofilament protein and alpha B crystalline, form Lewy bodies. Lewy bodies are a hallmark pathological feature of Parkinson's disease and other neurodegenerative diseases. Alpha synuclein has several possible phosphorylation sites, Ser129 in particular can be phosphorylated by G-protein-coupled receptor kinases. Studies suggest that this phosphorylation promotes formation of alpha synuclein filaments, with hyperphosphorylation of Ser129 seen in Lewy bodies. Western Blotting detects a band of approximately 15kDa in rat cortex lysate.

<b>Specificity</b>	ALPHA SYNUCLEIN
<b>Target</b>	Alpha Synuclein
<b>Immunogen</b>	Synthetic phosphopeptide corresponding to amino acid sequence surrounding phosphorylated serine 129 of Alpha Synuclein.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Rat, Bovine, Dog, Human, Mouse, Primates
<b>Conjugate</b>	Unconjugated

<b>Applications</b>	WB
<b>Format</b>	Purified IgG - liquid
<b>Size</b>	100 µl
<b>Preservative</b>	0.09% Sodium Azide
<b>Storage</b>	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Snca synuclein, alpha (non A4 component of amyloid precursor) [ Rattus norvegicus (Norway rat) ]</a>
<b>Official Symbol</b>	Snca
<b>Synonyms</b>	SNCA; synuclein, alpha (non A4 component of amyloid precursor); alpha-synuclein; ALPHA SYNUCLEIN;
<b>Entrez Gene ID</b>	<a href="#">29219</a>
<b>Protein Refseq</b>	<a href="#">NP_062042.1</a>
<b>UniProt ID</b>	P37377
<b>Chromosome Location</b>	4q24
<b>Pathway</b>	Alzheimer's disease; Amyloids; Disease; EGFR1 Signaling Pathway; Parkinson's disease;
<b>Function</b>	Hsp70 protein binding; alpha-tubulin binding; arachidonic acid binding