

**AP13472PU-N****Polyclonal Antibody to Alpha-Synuclein / SNCA (C-term) - Purified**

<b>Alternate names:</b>	NACP, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, PARK1
<b>Quantity:</b>	0.4 ml
<b>Concentration:</b>	lot specific
<b>Background:</b>	Alpha Synuclein is implicated in the regulation of dopamine release and transport. It is a soluble protein, expressed principally in the brain but also expressed in low concentrations in all tissues examined (except liver). In the nervous system, alpha Synuclein is primarily located at presynaptic terminals and is found membrane bound in dopaminergic neurons. It can form filamentous aggregates that are the major non amyloid component of intracellular inclusions in several neurodegenerative diseases (synucleinopathies), including Parkinson's Disease. Alpha Synuclein induces fibrillization of microtubule associated protein tau and reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase 3 activation. Alpha synuclein is a protein phosphorylated predominantly on serine residues. Additional splicing may be present but the full-length nature of these variants has not been determined. This variant (NACP112) lacks an alternate in-frame segment, compared to variant NACP140, resulting in a shorter protein (isoform NACP112) that has a distinct C-terminus, compared to isoform NACP140. This antibody recognizes both NACP112 and NCAP140.
<b>Uniprot ID:</b>	<a href="#">P37840</a>
<b>NCBI:</b>	<a href="#">NP_000336.1</a>
<b>GeneID:</b>	<a href="#">6622</a>
<b>Host / Isotype:</b>	Rabbit / Ig
<b>Immunogen:</b>	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide in the C-terminal region of human Alpha-synuclein that recognizes both NACP112 and NCAP140.
<b>Format:</b>	<b>State:</b> Liquid purified Ig <b>Purification:</b> Prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS <b>Buffer System:</b> PBS with 0.09% (W/V) sodium azide
<b>Applications:</b>	ELISA: 1/1,000. Western blotting: 1/100 - 1/500. Immunohistochemistry: 1/50 - 1/100. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts to Alpha-Synuclein. <b>Species:</b> Human. Other species not tested.

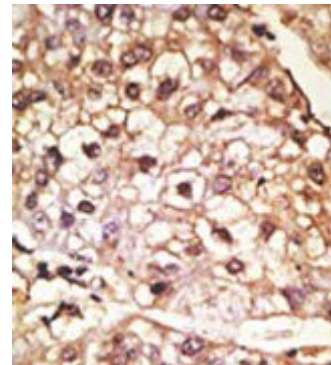
**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
 Avoid repeated freezing and thawing.  
 Shelf life: one year from despatch.

**Caution:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**General Readings:**

1. Kumru, H., et al., *Ann. Neurol.* 56(4):599-603 (2004).
2. Pigullo, S., et al., *Parkinsonism Relat. Disord.* 10(6):357-362 (2004).
3. Yao, D., et al., *Proc. Natl. Acad. Sci. U.S.A.* 101(29):10810-10814 (2004).
4. West, A.B., et al., *J. Biol. Chem.* 279(28):28896-28902 (2004).
5. Wang, F., et al., *Genes Chromosomes Cancer* 40(2):85-96 (2004).

**Pictures:** Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.



Western blot analysis of anti-Alpha-synuclein Pab in mouse brain tissue lysate. Alpha-synuclein (arrow) was detected using the purified Pab.

