10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-Ser129 Alpha Synuclein Antibody

Affinity purified rabbit polyclonal antibody

Catalog # AN1115

Specification

Phospho-Ser129 Alpha Synuclein Antibody - Product Information

Application	**WB**
Primary Accession	P37377
Reactivity	**Rat**
Predicted	**Bovine, Human, Mouse, Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**15 KDa**

Phospho-Ser129 Alpha Synuclein Antibody - Additional Information

Gene ID	**29219**
Gene Name	**SNCA**

Other Names
Alpha-synuclein, Snca

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser129 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity
Specific for the ~15 kDa alpha-synuclein protein phosphorylated at Ser129. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Ser129 Alpha Synuclein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

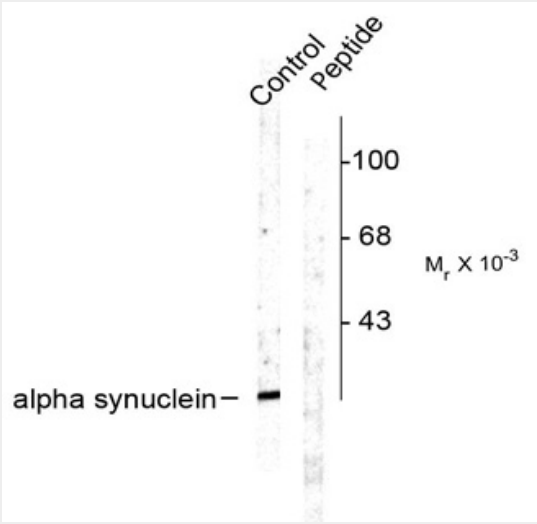
Phospho-Ser129 Alpha Synuclein Antibody - Protocols

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser129 Alpha Synuclein Antibody - Images



Western blot of rat cortex lysate showing specific labeling of the ~15 k alpha synuclein protein phosphorylated at Ser129. Immunolabeling is blocked by the phosphopeptide (peptide) used asantigen but not by the corresponding dephosphopeptide (not shown).

Phospho-Ser129 Alpha Synuclein Antibody - Background

Alpha-synuclein is a presynaptic neuronal protein that is thought to be involved in the formation of SNARE complexes. Most significantly, aggregated alpha-synuclein is one of the major components found in the Lewy bodies that occur in Parkinson's disease (PD) and other neurodegenerative disorders (Okochi et al., 2000). Mutation of the alpha-synuclein gene is associated with familial forms of PD (Newmann et al., 2002). Recent evidence suggests that phosphorylation of alpha-synuclein at ser129 plays a role in the formation of inclusions in PD (Smith et al., 2005; Masliah et al., 2005).

Phospho-Ser129 Alpha Synuclein Antibody - References

Okochi M, Walter J, Koyama A, Nakajo S, Baba M, Iwatsubo T, Meijer L, Kahle PJ, Haass C (2000) Constitutive phosphorylation of the Parkinson's disease associated alpha-synuclein. J Biol Chem Jan 7;275(1): 390-7.
Neumann M, Kahle PJ, Giasson BI, Ozmen L, Borroni E, Spooren W, Muller V, Odoy S, Fujiwara H, Hasegawa M, Iwatsubo T, Trojanowski JQ, Kretzschmar HA, Haass C (2002) Misfolded proteinase k resistant hyperphosphorylated alpha-synuclein in aged transgenic mice with locomotor deterioration and in human alpha synucleinopathies. J Clin Invest Nov; 110(10):1403-5.
Smith WW, Margolis RL, Li X, Troncoso JC, Lee MK, Dawson VL, Dawson TM, Iwatsubo T, Ross CA (2005) Alpha-synuclein phosphorylation enhances eosinophilic cytoplasmic inclusion formation in SH-SY5Y Cells. J Neurosci June 8; 25(23):5544-5552.

Masliah E, Rockenstein E, Adame A, Alford M, Crews L, Hashimoto M, Suebert P, Lee M, Goldstein J, Chilcote T, Games D, Schenk D (2005) Effects of alpha-synuclein immunization in a mouse model of Parkinson’s disease. Neuron Jun 16;46(6):857-868.