

Sheep antibody to alpha synuclein (108-120): affinity purified

Catalogue No.: S-078-50

Description: Alpha synuclein is an abundant 140 amino acid neuronal protein, expressed primarily at

presynaptic terminals in the central nervous system. Alpha synuclein has been associated with several neurodegenerative diseases. A point mutation in the gene coding for the alpha-synuclein protein was the first discovery linking this protein to a rare familial form of Parkinson's disease (PD). Subsequently, other mutations in the alpha-synuclein gene have been identified in familial PD. The aggregated proteinaceous inclusions called Lewy bodies found in PD and cortical Lewy body dementia (LBD) were discovered to be predominantly alpha-synuclein. Aberrant aggregation of alpha-synuclein has been detected in an increasing number of neurodegenerative diseases, collectively known Alpha-synuclein exists physiologically in both soluble and membrane-bound states, in unstructured and alpha-helical conformations, respectively. The physiological function of alpha-synuclein appears to require its translocation between these subcellular compartments and interconversion between the 2 conformations. Abnormal processing of alpha-synuclein is

predicted to lead to pathological changes in its binding properties and function.

Batch No.: See product label

Unit size: 50 ug

Antigen: A synthetic peptide (PQEGILEDMPVDPC) of human alpha synuclein protein (aa: 108-120)

conjugated to diphtheria toxoid has been used as the immunogen.

Other Names: Non-A beta component of AD amyloid; Non-A4 component of amyloid precursor; NACP

Accession: SYUA_HUMAN

Produced in: Sheep

Purity: Affinity purified and dialysed against PBS. Contains 0.02% sodium azide.

Applications: IHC. Recommended to be used at a concentration of 1 ug/mL for immunohistochemistry

(Paraffin sections). Biosensis recommends optimal dilutions/concentrations should be

determined by the end user.

Specificity: Immunihistochemical analysis of human and rat brain indicates a high level of specificity for this

antiserum. Specificity was also confirmed by western blot.

Cross-reactivity: This antiserum is known to react with human and rat alpha synuclein.

Form: Lyophilised

Reconstitution: Reconstitute in 50 uL of sterile water. Centrifuge to remove any insoluble material.

Storage: After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate

antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive

freeze/thaw cycles.

Expiry Date: 12 months after purchase

References: 1. Lundvig, et al Brain Res Mol Brain Res 134, 3-17 (Mar 24, 2005).

2. Bennett, Pharmacol Ther 105, 311-31 (Mar, 2005).

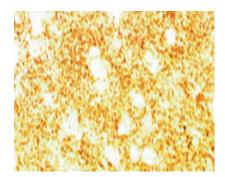
3. Vekrellis, et al., Mol Neurobiol 30, 1-21 (Aug, 2004).

FOR RESEARCH USE ONLY



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- 4. Martin, et al., Protein Pept Lett 11, 229-37 (Jun, 2004).
- 5. Doherty, et al., Acta Neuropathol (Berl) 107, 169-75 (Feb, 2004).
- 6. Goedert, Curr Opin Genet Dev 11, 343-51 (Jun, 2001).
- 7. Saito, et al., J Neurol Sci 177, 48-59 (Aug 1, 2000).
- 8. Lucking et al. Cell Mol Life Sci. 2000 Dec;57(13-14):1894-908.
- 9. Kahle, et al., Ann N Y Acad Sci 920, 33-41 (2000).
- 10. Clayton, et al., Trends Neurosci 21, 249-54 (Jun, 1998).



Immunohistochemical staining (paraffin-embedded tissue) of alpha synuclein in human neocortex using sheep polyclonal to human alpha synuclein, catalogue number S-078-50.