

Mouse anti-Human Alpha Synuclein Monoclonal Antibody | anti-SNCA antibody

Alpha Synuclein Mmab

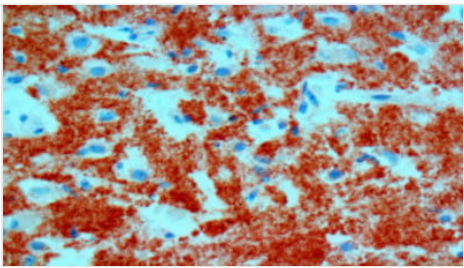
CATALOG # AAA59307	HOST Mouse	REACTIVITY Human
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PRODUCT SYNONYMS

Alpha Synuclein; Monoclonal Antibody; Alpha Synuclein Mmab; anti-SNCA antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a/K
Clone Number	BSB-114
Sequence Length	13
Immunogen	Recombinant protein of the human alpha synuclein.
Localization	Cytoplasmic, Nuclear
Control	Brain, Breast, Skin, Tonsil, Bone Marrow, Alzheimer's Disease, Parkinson's Disease.
Precautions	1. This product contains <0.1% sodium azide (NaN₃) as a preservative. Ensure proper handling procedures are used with this reagent. 2. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents. 3. Dispose of unused solution with copious amounts of water. 4. Do not ingest reagent. If reagent is ingested, seek medical advice immediately. 5. Avoid contact with eyes. If contact occurs, flush with large quantities of water. 6. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar). 7. For additional safety information refer to Safety Data Sheet for this product. 8. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and AMDL" (see References in this document).
Specimen Preparation	Paraffin sections: The antibody can be used on formalin-fixed paraffin embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation to ensure best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using MBS ImmunoDNA Retriever with Citrate, ImmunoDNA Retriever with EDTA or ImmunoDNA Digestor. See reverse side for complete protocol. Tissue should remain hydrated via use of MBS Immuno/DNA Washer solutions. Frozen sections and cell preparations: The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.
Mounting Protocols	For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter or organic solvent based resin such as PermaMounter.
Product Limitations	Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls.
Preparation and Storage	Store at 2-8°C. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.



IHC (Immunohistochemistry)
Inset: IHC of Alpha Synuclein on a FFPE Astrocytoma Tissue

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain	Varies	Varies	Varies

Staining Procedure

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Hydrophilic Plus Slides.2. Air dry for 2 hours at 58° C.3. Deparaffinize, dehydrate and rehydrate tissues.4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate or EDTA.5. Any of three heating methods may be used:a. TintoRetriever Pressure Cooker or EquivalentPlace tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.b. TintoRetriever PT Module or Water Bath MethodPlace tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.c. Conventional Steamer MethodPlace tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a Steamer, cover and steam for 30-60 minutes.6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.7. For manual staining, perform antibody incubation according to instrument manufacturer's instructions.8. Wash slides with IHC wash buffer or DI water.9. Continue IHC staining protocol.Recommended IHC Protocol

Antibody Type	Dilution	Volume/Qty
Tinto Prediluted	Ready-to-Use	3.0 mL
Tinto Prediluted	Ready-to-Use	7.0 mL
Tinto Prediluted	Ready-to-Use	15.0 mL
Concentrated	1:25 - 1:100	0.1 mL
Concentrated	1:25 - 1:100	0.5 mL
Concentrated	1:25 - 1:100	1.0 mL
Control Slides	Not Applicable	5 slides

Application Data
Alpha Synuclein is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodiumazide as a preservative.

ADDITIONAL INFORMATION

Related Product Information for anti-SNCA antibody

Alpha-synuclein is a 140 amino acids protein encoded by the SNCA gene. It is predominantly expressed in the neocortex, hippocampus, substantia nigra, thalamus, and cerebellum with smaller amounts are found in the heart, muscles, and other tissues. In the brain, alpha-synuclein is found mainly in presynaptic terminals.

An alpha-synuclein fragment, known as the non-Abeta component (NAC) of Alzheimer's disease amyloid, originally found in an amyloid-enriched fraction, was shown to be a fragment of its precursor protein, NACP. Alpha-synuclein aggregates to form insoluble fibrils in pathological conditions characterized by Lewy bodies, such as Parkinson's disease, dementia with Lewy bodies and multiple system atrophy. These disorders are known as synucleinopathies. Occasionally, Lewy bodies contain tau protein; however, alpha-synuclein and tau constitute two distinctive subsets of filaments in the same inclusion bodies.

Alpha-synuclein pathology is also found in both sporadic and familial cases with Alzheimer's disease. In rare cases of familial forms of Parkinson's disease, there is a mutation in the gene coding for alpha-synuclein. Genomic duplication and triplication of the gene appear to be a rare cause of Parkinson's disease in other lineages, although more common than point mutations. Hence certain mutations of alpha-synuclein may cause it to form amyloid-like fibrils that contribute to Parkinson's disease.

NCBI AND UNIPROT INFORMATION

NCBI GI #	46242542
NCBI GeneID	6622
Molecular Weight	13,109 Da
NCBI Official Full Name	alpha synuclein, partial
NCBI Official Synonym Full Names	synuclein alpha
NCBI Official Symbol	SNCA
NCBI Official Synonym Symbols	PD1; NACP; PARK1; PARK4
NCBI Protein Information	alpha-synuclein
UniProt Protein Name	Alpha-synuclein
UniProt Gene Name	SNCA
UniProt Synonym Gene Names	NACP; PARK1; NACP
UniProt Entry Name	SYUA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/alpha-synuclein-antibody-clone-bsb-114-elisa/59307>