

Product datasheet

Human Alpha-synuclein Antibody Pair - BSA and Azide free ab270346

Recombinant RabMAb

6 Images

Overview

Product name	Human Alpha-synuclein Antibody Pair - BSA and Azide free
Assay type	ELISA set
Range	614.54 pg/ml - 7000 pg/ml
Species reactivity	Reacts with: Human
Product overview	<p>The Antibody Pair can be used to quantify Human Alpha-synuclein. BSA and Azide free antibody pairs include unconjugated capture and detector antibodies suitable for sandwich ELISAs. The antibodies are provided at an approximate concentration of 1 mg/ml as measured by the protein A280 method. The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Both capture and detector antibodies are rabbit monoclonal antibodies delivering consistent, specific, and sensitive results.</p> <p>For additional information on the performance of the antibody pair, see the equivalent SimpleStep ELISA® Kit (ab260052), which uses the same antibodies. However, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits. Please note that the range provided for the pairs is only an estimation based on the performance of the related product using the same antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody pair in your assay.</p> <p>Download SDS here.</p>
Tested applications	Suitable for: Sandwich ELISA
Platform	Reagents

Properties

Storage instructions	Store at +4°C. Please refer to protocols.
Carrier free	Yes

Components	10 x 96 tests
Human Alpha-synuclein Capture Antibody (unconjugated)	1 x 100µg
Human Alpha-synuclein Detector Antibody (unconjugated)	1 x 100µg

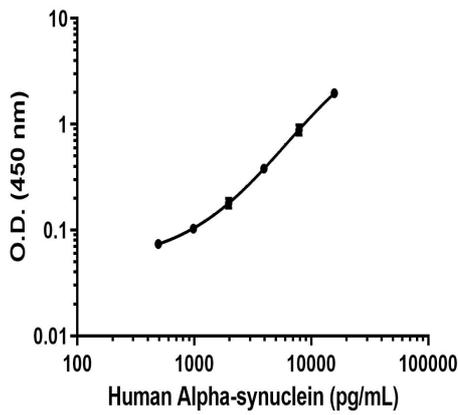
Function	May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.
Tissue specificity	Expressed principally in brain but is also expressed in low concentrations in all tissues examined except in liver. Concentrated in presynaptic nerve terminals.
Involvement in disease	Genetic alterations of SNCA resulting in aberrant polymerization into fibrils, are associated with several neurodegenerative diseases (synucleinopathies). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimer disease amyloid plaque, and a major component of Lewy body inclusions. They are also found within Lewy body (LB)-like intraneuronal inclusions, glial inclusions and axonal spheroids in neurodegeneration with brain iron accumulation type 1. Parkinson disease 1 Parkinson disease 4 Dementia Lewy body
Sequence similarities	Belongs to the synuclein family.
Domain	The 'non A-beta component of Alzheimer disease amyloid plaque' domain (NAC domain) is involved in fibrils formation. The middle hydrophobic region forms the core of the filaments. The C-terminus may regulate aggregation and determine the diameter of the filaments.
Post-translational modifications	Phosphorylated, predominantly on serine residues. Phosphorylation by CK1 appears to occur on residues distinct from the residue phosphorylated by other kinases. Phosphorylation of Ser-129 is selective and extensive in synucleinopathy lesions. In vitro, phosphorylation at Ser-129 promoted insoluble fibril formation. Phosphorylated on Tyr-125 by a PTK2B-dependent pathway upon osmotic stress. Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers. Ubiquitinated. The predominant conjugate is the diubiquitinated form. Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.
Cellular localization	Cytoplasm, cytosol. Membrane. Nucleus. Cell junction, synapse. Secreted. Membrane-bound in dopaminergic neurons.

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab270346 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

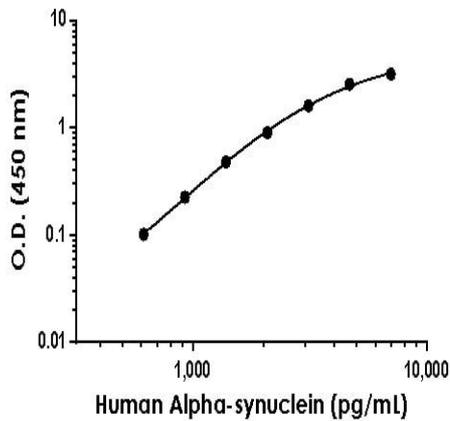
Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images



Sandwich ELISA - Recombinant human Alpha-Synuclein protein filament standard curve

Background subtracted standard curve using Human Alpha-synuclein Antibody Pair - BSA and Azide free (ab270346) and Recombinant human Alpha-Synuclein protein filament (ab254309) in sandwich ELISA. The ELISA was performed using the components of the corresponding SimpleStep® kit, which uses the same antibody pair with a different formulation and format.



Sandwich ELISA - Human Alpha-synuclein Antibody Pair - BSA and Azide free (ab270346)

Representative standard curve from corresponding SimpleStep ELISA® Kit (ab260052), which uses the same antibody pair. For additional information on the performance of pair and kit, refer to the corresponding kit datasheet. Due to differences in the formulation and format of the antibodies in this pair, they cannot be used as substitutes for the antibody components in our SimpleStep ELISA® Kits.

Standard Curve Measurements			
Concentration (pg/ml)	O.D 450 nm		Mean O.D
	1	2	
0	0.057	0.059	0.058
615	0.162	0.158	0.160
922	0.282	0.285	0.284
1,383	0.531	0.544	0.537
2,074	0.943	0.985	0.964
3,111	1.687	1.653	1.670
4,667	2.550	2.663	2.607
7,000	3.192	3.261	3.226

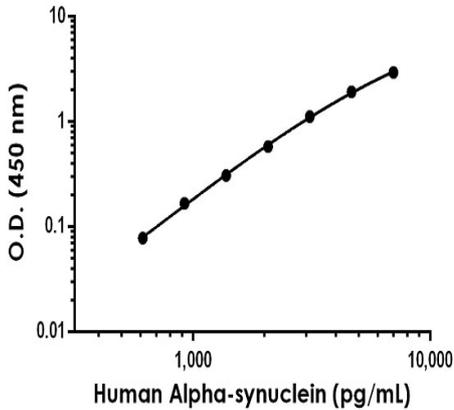
Sandwich ELISA - Human Alpha-synuclein Antibody Pair - BSA and Azide free (ab270346)

Representative standard curve from corresponding SimpleStep ELISA® Kit (ab260052), which uses the same antibody pair. For additional information on the performance of pair and kit, refer to the corresponding kit datasheet. Due to differences in the formulation and format of the antibodies in this pair, they cannot be used as substitutes for the antibody components in our SimpleStep ELISA® Kits.

Standard Curve Measurements			
Concentration (pg/mL)	O.D 450 nm		Mean O.D
	1	2	
0	0.079	0.079	0.079
615	0.161	0.154	0.157
922	0.247	0.244	0.245
1,383	0.392	0.383	0.387
2,074	0.646	0.670	0.658
3,111	1.181	1.221	1.201
4,667	2.081	1.921	2.001
7,000	3.136	2.913	3.025

Sandwich ELISA - Human Alpha-synuclein Antibody
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Sandwich ELISA - Human Alpha-synuclein Antibody
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Powered by recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Human Alpha-synuclein Antibody
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To learn more about the advantages of recombinant antibodies see [here](#).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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