Human alpha-Synuclein ELISA Kit

Complete sandwich ELISA for human alpha-Synuclein (α-synuclein), a key protein implicated in Parkinson's disease and other synucleinopathies, including dementia with Lewy bodies and multiple system atrophy.

The **Human alpha-Synuclein ELISA Kit** is a quantitative sandwich immunoassay for detection of total human alpha-Synuclein (SNCA) in serum, plasma, and CSF. This ready-to-use kit supports research into Parkinson's disease, Lewy body dementia, and multiple system atrophy.

Alpha-Synuclein (SNCA) is a 140-amino-acid presynaptic protein implicated in Parkinson's disease (PD) and related synucleinopathies. Missense mutations, including A53T, A30P, and E46K, as well as SNCA gene duplication and triplication, are associated with familial Parkinson's disease. Misfolded alpha-synuclein aggregates are a pathological hallmark of PD and dementia with Lewy bodies (DLB), forming Lewy bodies and Lewy neurites, and are also implicated in multiple system atrophy (MSA), where they accumulate primarily in oligodendroglial cytoplasmic inclusions. Cerebrospinal fluid (CSF) total alpha-synuclein levels are often lower in PD than in controls, although findings vary by study and disease. Oligomeric and phosphorylated alpha-synuclein, particularly at Ser129, are under investigation as disease-associated biomarkers. Blood-based alpha-synuclein assays are also being studied for their potential role in disease detection and stratification, although clinical utility remains under evaluation.

Ordering Information

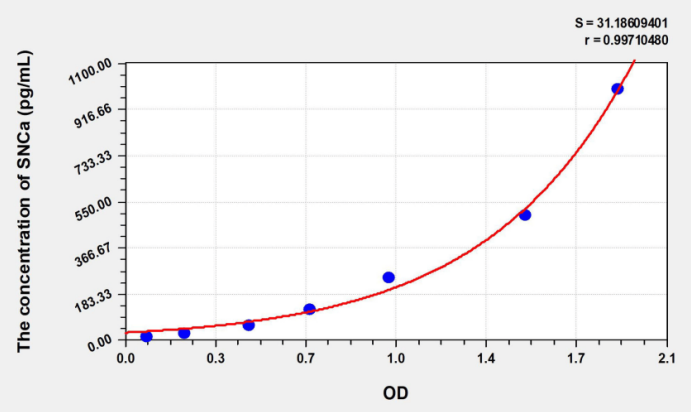
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ENZ-KIT270-0001	

Manuals, SDS & CofA

View Online »

- Validated for serum, plasma, and CSF
- Detects total alpha-Synuclein (all forms including monomeric)
- 96-well breakaway strip format; intra-assay CV <8%; inter-assay CV <10%



Representative Standard Curve — Human Alpha-Synuclein (SNCA) ELISA Kit (ENZ-KIT270)

Handling & Storage

Use/Stability	When stored and handled as directed, the kit is stable until the expiration date on the label.
Handling	Store at 4°C upon receipt. For extended storage, keep at −20°C. Use before the expiry date printed on the label.
Short Term Storage	+4°C
Long Term Storage	−20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	ELISA
Application Notes	Quantification of total alpha-Synuclein in CSF, plasma, and serum for Parkinson’s disease biomarker research and synucleinopathy studies. Suitable for aggregation kinetics studies and therapeutic target monitoring.
Assay Time	3.5 hours
Compatibility	Standard 96-well microplate reader capable of reading absorbance at 450 nm.
Contents	Pre-Coated Microplate, 96 well (12 breakaway strips of 8); Standard (Lyophilized); Biotinylated Detection Antibody (100×); Streptavidin-HRP Conjugate (100×); Standard/Sample Diluent Buffer; Biotinylated Antibody Diluent; HRP Diluent; Wash Buffer (25×); TMB Substrate Solution; Stop Reagent; Adhesive Plate Covers
Gene/Protein Identifier	SNCA
Sensitivity	6.7 pg/mL (Detection range: 15.63-1000 pg/mL)
Species Reactivity	Human
Specificity	Human alpha-Synuclein

Technical Info / Product Notes	Two-step sequential sandwich ELISA. Capture antibody pre-coated on breakaway 96-well strips. Step 1: sample/standard incubation, 37°C, 80 min. Step 2: biotinylated detection antibody, 37°C, 50 min. Step 3: Streptavidin-HRP, 37°C, 50 min. Step 4: TMB substrate, 37°C, 20 min (protected from light). Stop reagent added; read at 450 nm. Intra-assay CV <8%; inter-assay CV <10%. Standard reconstituted in Standard/Sample Diluent Buffer. Do not mix reagents from different lot numbers (exception: TMB, Wash Buffer, Stop Reagent). Azide-free buffers required — azide inhibits HRP color development. Detection range: 15.63–1,000 pg/mL. Sensitivity: 6.7 pg/mL. Detects total alpha-Synuclein. Standard range top: 1,000 pg/mL.
UniProt ID	P37840
Wavelength	450 nm

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