

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human α -Synuclein in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human (rh) β -Synuclein and rhy-Synuclein is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human α -Synuclein Met1-Ala140 Accession # P37840
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

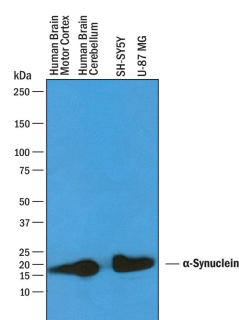
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human α -Synuclein Monoclonal Antibody (Catalog # MAB13384) . <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human alpha-Synuclein DuoSet ELISA Kit (Catalog # DY1338-05) for convenient development of a sandwich ELISA.</i>	

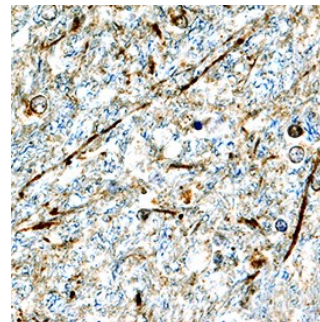
DATA

Western Blot



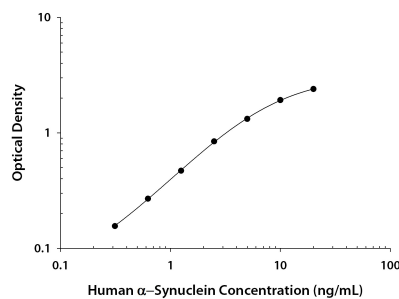
Detection of Human α -Synuclein by Western Blot. Western blot shows lysates of human brain (motor cortex) tissue, human brain (cerebellum) tissue, SH-SY5Y human neuroblastoma cell line, and U-87 MG human glioblastoma/astrocytoma cell line. PVDF membrane was probed with 1 μ g/mL of Goat Anti-Human α -Synuclein Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1338) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # [HAF019](#)). A specific band was detected for α -Synuclein at approximately 18 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



α -Synuclein in Human Brain. α -Synuclein was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using Goat Anti-Human α -Synuclein Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1338) at 15 μ g/mL overnight at 4 $^{\circ}$ C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # [CTS008](#)) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal processes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

ELISA



Human α -Synuclein ELISA Standard Curve. Recombinant Human α -Synuclein protein was serially diluted 2-fold and captured by Mouse Anti-Human α -Synuclein Monoclonal Antibody (Catalog # [MAB13384](#)) coated on a Clear Polystyrene Microplate (Catalog # [DY990](#)). Goat Anti-Human α -Synuclein Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1338) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # [DY998](#)) followed by Substrate Solution (Catalog # [DY999](#)) and stopping the enzymatic reaction with Stop Solution (Catalog # [DY994](#)).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

α -Synuclein is a cytoplasmic protein that is predominantly expressed in the central nervous system. It is a minor protein found in amyloid deposition that is a hallmark of Alzheimer's disease. Defects in SNCA are associated with familial Parkinson's disease.