MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: March 25, 2025
Effective Date: March 25, 2025

Alpha-Synuclein Protein Aggregates, Spinal Fluid

Test ID: ASYNC

Highlights:

The SAAmplify-aSYN test is a cerebrospinal fluid biomarker test that benefits adult patients exhibiting signs and symptoms of clinically uncertain cognitive decline or clinically uncertain parkinsonian syndromes, such as Parkinson disease, atypical parkinsonism, dementia with Lewy bodies, Alzheimer disease, mild cognitive impairment, and multiple system atrophy.

Useful for:

Detection of pathogenic alpha-synuclein (alpha-synuclein aggregates) in adult patients being assessed for clinically uncertain cognitive decline or clinically uncertain Parkinsonian syndromes

Methods:

Seed Amplification Assay (SAA)

Reference Values:

An interpretive report will be provided

Specimen Requirements:

Supplies:	Sterile Specimen Tube, 6 mL (T485)
Container/Tube:	Sterile polypropylene tube **Note: Polypropylene collection tubes must be used.**
Specimen Volume:	1 mL
Collection Instructions:	1. Perform lumbar puncture and discard the first 1 to 2 mL of cerebrospinal fluid (CSF). 2. Collect CSF directly into a sterile polypropylene tube. 3. Inspect specimen for visible discoloration. Specimen must be clear and colorless to perform testing. **Do not centrifuge**. 4. Freeze sample upright prior to placing in transport container.
Minimum Volume:	0.3 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
CSF	Frozen (preferred)	60 days
	Refrigerated	14 days

Cautions:

Results must be interpreted in conjunction with other patient clinical information.

The alpha-synuclein (aSyn) protein test utilizes fluorescence to detect increases in aSyn aggregate formation. Validation studies have determined that certain substances such as blood, hemoglobin, and conjugated bilirubin may affect results at concentrations where visible discoloration is evident in the CSF. The laboratory will evaluate all specimens submitted for suitability for testing. Sensitivity for detection of alpha-synuclein aggregates with a Detected-2 profile is low; therefore, results should be interpreted with caution for the purposes of rule in/rule out multiple system atrophy.

This test is for professional use only.

CPT Code:

0393U

Day(s) Performed: Varies

Report Available: 15 to 18 days

Questions

Contact Amy Ennis, Laboratory Resource Coordinator at 800-533-1710.