المختبر المرجعي الوطني
National Reference Laboratory
Brought to you by M42

CAP ACCREDITED
COLLEGE of AMERICAN PATHOLOGISTS

NEW TEST UPDATE September 2, 2025

Phosphorylated Tau 217/Amyloid-beta 42 Ratio

The National Reference Laboratory is pleased to announce the introduction of in-house testing for **Phosphorylated Tau 217/Amyloid-beta 42 Ratio (p-tau 217/Aβ42 Ratio).** This implementation enhances our turnaround time and diagnostic reliability for Alzheimer's disease (AD) and the investigation of neurological decline.

p-tau 217/Aβ42 testing by Chemiluminescent Enzyme Immunoassay (CLEIA) is an FDA-approved, highly sensitive and specific test for the early detection of Amyloid-beta pathology, making it feasible for AD screening in clinical practice. It correlates strongly with core AD pathology as determined by cerebrospinal fluid (CSF) biomarkers, positron emission tomography (PET), or post-mortem examination.

Limitations of the test

There are recognized risks of false-positive results, including:

- **Certain clinical syndromes** with peripheral p-tau217 production, such as amyotrophic lateral sclerosis (ALS) and Niemann-Pick disease (NPD).
- **Medications** such as Entresto, which can alter amyloid metabolism in peripheral tissues.
- **Obesity** in African American populations, where studies suggest naturally higher baseline values, potentially requiring different reference ranges.
- **Severe chronic kidney disease (CKD)** may cause accumulation of p-Tau 217 and Amyloid leading to false positives, though studies suggest these changes are not clinically significant.

Testing is performed in-house using the **Fujirebio Lumipulse® G**.

Details for test ordering are listed below:

Test Name	**Phosphorylated Tau 217/Amyloid-beta 42 Ratio**
Order Code	2925042
Synonyms	p-tau 217/AB-42 Ratio, p-tau 217/AB 1-42 Ratio
Sample Type	Plasma
Container	K_2-EDTA Plasma (Lavender Top)
Sample Volume	Minimum 2 mL
Transport Conditions	2-8°C
Storage & Stability	Stable for 3 days when refrigerated (2–8°C) and 14 days when frozen (-20°C) as an aliquot.
Turnaround Time	7 Days
Methodology	Lumipulse®, Chemiluminescent Enzyme Immunoassay (CLEIA)
Rejection Criteria	Samples other than K_2-EDTA plasma; insufficient volume; unlabelled containers

For more information, please contact our **Technical Support Team** on CustomerCare@nrl.ae or 800-675.

Public