

CSF false-bottom tubes

The new standard for Alzheimer's disease diagnostics



- ✓ Excellent recovery thanks to low-binding properties
- ✓ Routine-use primary container for sample collection and automated analytics
- ✓ Patient-friendly sample volume of 2.5 ml
- ✓ Cost-effective alternative to PET scan
- ✓ Reliable pre-analytics for optimum sample integrity



CSF false-bottom tubes – sets new standards in the early detection of Alzheimer’s disease

Aducanumab will soon be approved by the ‘U.S. Food and Drug Administration (FDA)’ as an Alzheimer’s agent to slow the progression of Alzheimer’s disease. Approval for the European market is also still expected in 2021. The hope that this news brings will increase the need for early diagnosis.

Particularly in the early stages of dementia illnesses, the determination of Alzheimer’s disease biomarkers (β-amyloid, total tau & phospho-tau) increasingly supports CSF-based nuclear medicine dementia diagnostics.

The new CSF false-bottom tubes create the perfect conditions for reliable pre-analytics to support the current development in research, diagnostics and treatment of Alzheimer’s disease.



CSF false-bottom tubes

Order no	Material	Volume	Length & Ø	Design	Packaging
63.614.625	Polypropylene	2.5 ml	75 x 13 mm	Low-Binding	Individually wrapped, sterile 100/outer box

Optimised analytics through low-binding properties

For adult patients with cognitive impairments who are being evaluated for Alzheimer’s disease (AD) and other causes of cognitive impairments, the determination of AD biomarkers in cerebrospinal fluid (CSF) is an extremely cost-effective and routine-use alternative to nuclear medical amyloid positron emission tomography (PET) scans.

Alzheimer’s disease biomarkers have the ability to bind to surfaces, in turn complicating pre-analytical conditions. This especially applies to β-amyloid fragments.¹⁻⁵ The binding takes

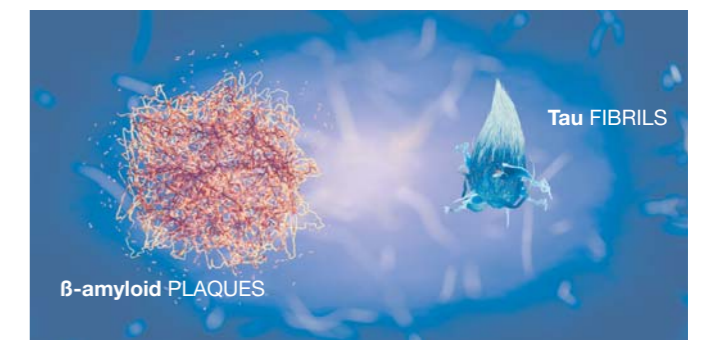
place very quickly, even after just five minutes, a concentration loss (analyte loss) of 20% could be detected.³

In light of this, a new CSF sample tube was developed using a special material. The SARSTEDT CSF false-bottom tubes combine for the first time, optimal low-binding properties with the demands of a routine-use sample tube for a very special sample. This ensures greater compatibility of the analytical results.

Pre-analytics & analytics

The purpose of a standardised pre-analytical protocol for AD diagnostics is that it helps minimise systematic influences from pre-analytics, for example, and enables consistent cutoff values.

The CSF false-bottom tubes have the best recovery of Alzheimer’s disease biomarkers with Roche’s new generation of immunoassays. Based on this, it is bindingly defined by Roche as “the CSF primary container” and is recommended as the optimal standard for new standardised pre-analytical protocols.¹



SARSTEDT AG & Co. KG

P.O. Box 12 20

D-51582 Nümbrecht

Phone: +49 2293 305 0

Fax: +49 2293 305 3992

export@sarstedt.com

www.sarstedt.com

References:

- ¹ Hansson O, Rutz S, Zetterberg H, et al. Pre-analytical protocol for measuring Alzheimer's disease biomarkers in fresh CSF; Alzheimer Dement. 2020;12:e12137. <https://doi.org/10.1002/dad2.12137>
- ² Toombs J, Paterson RW, Lunn MP, Nicholas JM, Fox NC, Chapman MD, et al. Identification of an important potential confound in CSF AD studies: aliquot volume. Clin Chem Lab Med 2013; 51:2311-7.
- ³ Perret-Liaudet A, Pelpel M, Tholance Y, Dumont B, Vanderstichele H, Zorzi W, et al. Risk of Alzheimer's disease biological misdiagnosis linked to cerebrospinal collection tubes. J Alzheimers Dis 2012;31:13-20.
- ⁴ Bjerje M, Portelius E, Minthon L, Wallin A, Ancharsater H, Ancharsater R, et al. Confounding factors influencing amyloid beta concentration in cerebrospinal fluid. Int J Alzheimers Dis 2010;2010:1-11.
- ⁵ Lewczuk P, Beck G, Esselmann H, Bruckmoser R, Zimmermann R, Fiszer M, et al. Effect of sample collection tubes on cerebrospinal fluid concentrations of tau proteins and amyloid beta peptides. Clin Chem 2006;52:332-4.

