

BRAIN-DERIVED TAU LUMINESCENCE IMMUNOASSAY.

BRAIN-DERIVED TAU DETECTION - MADE SIMPLE IN BLOOD.



BRAIN-DERIVED TAU DETECTION – MADE SIMPLE IN BLOOD.

Combining a specific antibody targeting brain-derived Tau (BD-Tau) with upfront immunoprecipitation, BD-Tau LUM offers researchers a powerful and accessible tool to investigate Alzheimer’s disease pathology, progression and biomarker dynamics in plasma.

The Tau protein is a microtubule-stabilizing protein being part of the axons of nerve cells in the central nervous system (CNS). Measuring total Tau in CSF reflects axonal destruction and has found its way into diagnostic criteria guidelines¹, but measuring total Tau in blood does not correlate with its

corresponding CSF value. As 80% of Tau in blood originates from peripheral tissue, being able to selectively measure the brain-derived fraction will enhance specificity and accessibility of Tau as an AD biomarker. The antibody used in the BD-Tau LUM is targeting the brain-derived Tau isoform only.

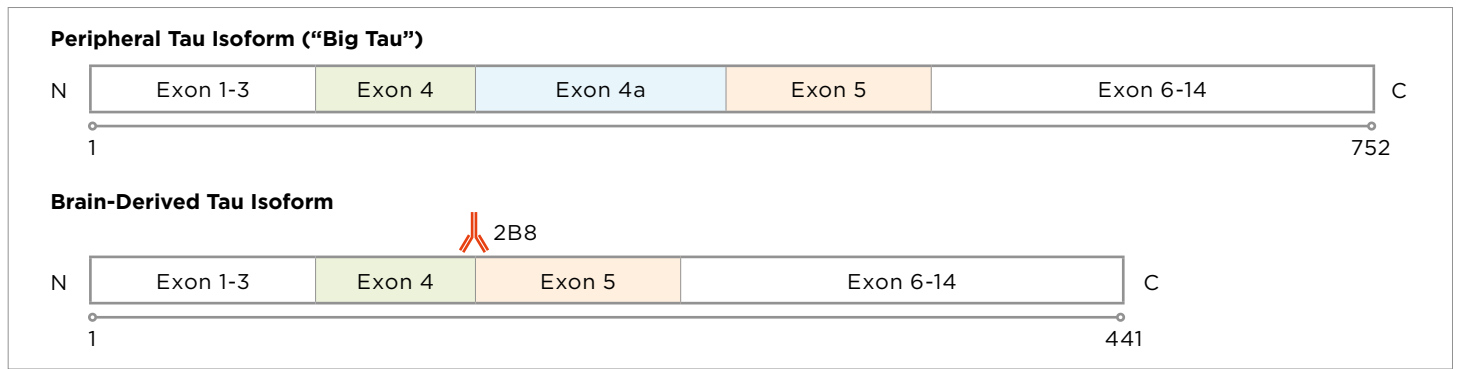


Fig. 1: Difference between the peripheral and brain-derived Tau isoforms and binding site of the 2B8 clone used in our assay.

The analysis of brain-derived Tau is coupled with a pre-analytical immunoprecipitation (IP) step to enhance better detection in the later assay.

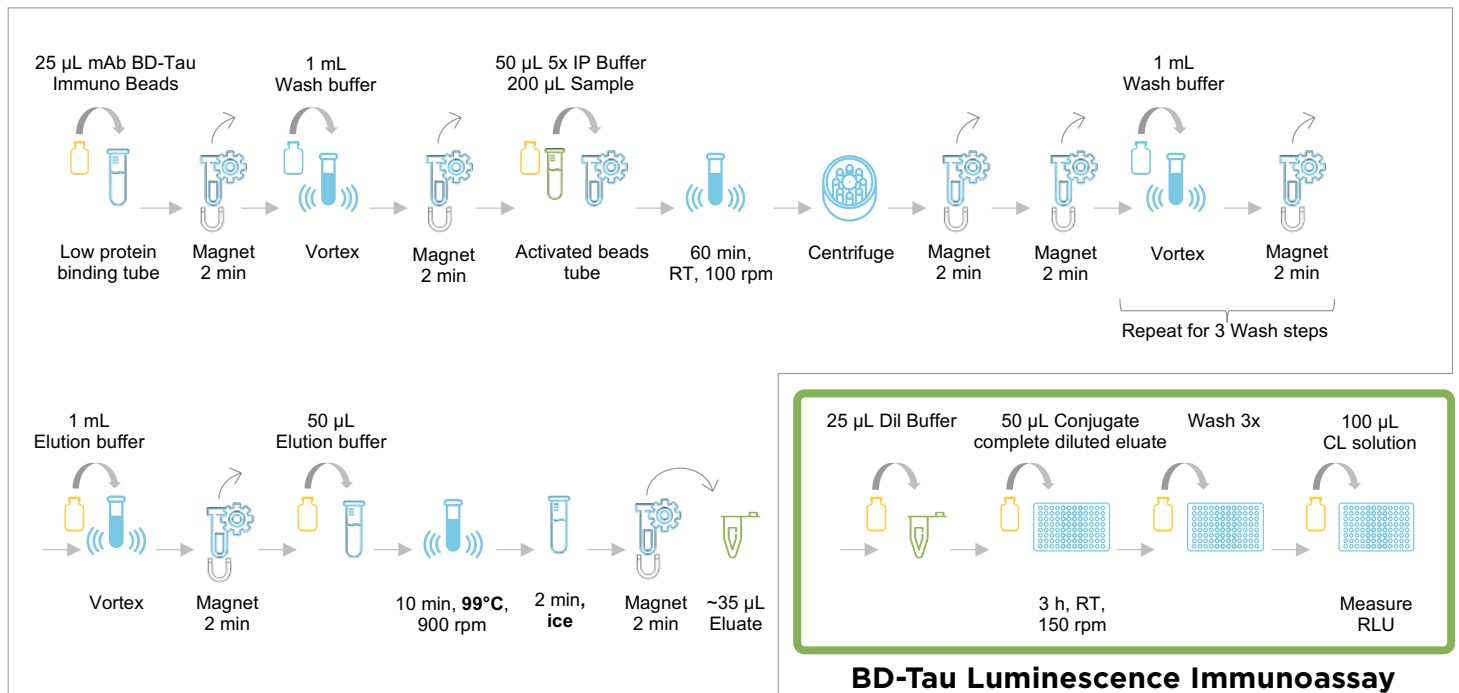


Fig. 2: Workflow (IP) and assay

Values of measuring BD-Tau

- Detection of brain-specific Tau fractions
- BD-Tau provides a more specific signal of neurodegeneration compared to total Tau measured in plasma.²
- Measurement of BD-Tau in blood samples correlates well to total Tau measurements in CSF.³
- Enables longitudinal assessment of biomarker level changes related to Alzheimer's disease.⁴
- Reflects disease severity and progression trends supporting biomarker discovery and validation.⁴
- Complementary to measuring Amyloid-beta 1-42 and pTau217 in plasma helping to stratify participants based on recommendation of anti-amyloid treatment studies.⁴

Using an assay to detect BD-Tau in blood samples provides a low-invasive research tool to help screen and stratify participants for different kinds of studies.

Key benefits of Tecan solution

- Accessible tool to monitor disease dynamics in research context
- First luminescence-based immunoassay for BD-Tau in plasma
- Compatible with standard lab equipment - no need for complex platforms
- RUO* kit format for labs involved in Neurodegeneration research studies, academic centers, and translational studies

PRODUCTS

30260912	BD-Tau Neuro IP Kit
30260913	BD-Tau Luminescence Immunoassay

*RUO, For Research Use Only

Not intended for clinical diagnostic use. Not all products are available in all markets. For further information on product availability and regulatory status in your region, please contact your local Tecan representative.

The Brain-derived Tau (BD-Tau) LUM is a sensitive and accessible research-use only blood assay.

References

1. Jack, C. R., Jr, Andrews, S. J., Beach, T. G., Buracchio, T., Dunn, B., Graf, A., Hansson, O., Ho, C., Jagust, W., McDade, E., Molinuevo, J. L., Okonkwo, O. C., Pani, L., Rafii, M. S., ... , R., Teunissen, C. E., & Carrillo, M. C. (2024). Revised criteria for the diagnosis and staging of Alzheimer's disease. *Nature medicine*, 30(8), 2121-2124. <https://doi.org/10.1038/s41591-024-02988-7>
2. Zeng, X., Chen, Y., Sehrawat, A., Lee, J., Lafferty, T. K., Kofler, J., Berman, S. B., Sweet, R. A., Tudorascu, D. L., Klunk, W. E., Ikonovic, M. D., Pfister, A., Zetterberg, H., Snitz, B. E., Cohen, A. D., Villemagne, V. L., Pascoal, T. A., Kamboh, M. I., Lopez, O. I., Blennow, K., ... Karikari, T. K. (2024). Alzheimer blood biomarkers: practical guidelines for study design, sample collection, processing, biobanking, measurement and result reporting. *Molecular neurodegeneration*, 19(1), 40. <https://doi.org/10.1186/s13024-024-00711-1>
3. Gonzalez-Ortiz, F., Turton, M., Kac, P. R., Smirnov, D., Premi, E., Ghidoni, R., Benussi, L., Cantoni, V., Saraceno, C., Rivolta, J., Ashton, N. J., Borroni, B., Galasko, D., Harrison, P., Zetterberg, H., Blennow, K., & Karikari, T. K. (2023). Brain-derived tau: a novel blood-based biomarker for Alzheimer's disease-type neurodegeneration. *Brain : a journal of neurology*, 146(3), 1152-1165. <https://doi.org/10.1093/brain/awac407>
4. Gonzalez-Ortiz, F., Kirsebom, B. E., Contador, J., Tanley, J. E., Selnes, P., Gísladóttir, B., Pålhaugen, L., Suhr Hemminghyth, M., Jarholm, J., Skogseth, R., Bråthen, G., Grøndtvedt, G., Bjørnerud, A., Tecelao, S., Waterloo, K., Aarsland, D., Fernández-Lebrero, A., García-Escobar, G., Navalpotro-Gómez, I., Turton, M., ... Blennow, K. (2024). Plasma brain-derived tau is an amyloid-associated neurodegeneration biomarker in Alzheimer's disease. *Nature communications*, 15(1), 2908. <https://doi.org/10.1038/s41467-024-47286-5>

Supplied by:



Tel: +44 (0)1235 431390
sales@oxfordbiosystems.com
www.oxfordbiosystems.com



Distributed by

IBL International GmbH
Flughafenstrasse 52a
22335 Hamburg
Germany

Phone: +49 (0)40-53 28 91-0
Fax: +49 (0)40-53 28 91-11
Email: IBL@Tecan.com
www.tecan.com/ibl

.....
Australia +61 3 9647 4100 **Austria** +43 62 46 89 330 **Belgium** +32 15 42 13 19 **China** +86 21 220 63 206 **France** +33 4 72 76 04 80 **Germany** +49 79 51 94 170
Italy +39 02 92 44 790 **Japan** +81 44 556 73 11 **Netherlands** +31 18 34 48 17 4 **Nordic** +46 8 750 39 40 **Singapore** +65 644 41 886 **Spain** +34 93 595 25 31
Switzerland +41 44 922 89 22 **UK** +44 118 9300 300 **USA** +1 919 361 5200 **Other countries** +41 44 922 81 11
.....

Tecan Group Ltd. makes every effort to include accurate and up-to-date information within this publication, however, it is possible that omissions or errors might have occurred. Tecan Group Ltd. cannot, therefore, make any representations or warranties, expressed or implied, as to the accuracy or completeness of the information provided in this publication. Changes in this publication can be made at any time without notice. All mentioned trademarks are protected by law. In general, the trademarks and designs referenced herein are trademarks, or registered trademarks, of Tecan Group Ltd., Männedorf, Switzerland. A complete list may be found at <http://www.tecan.com/trademarks>. Product names and company names that are not contained in the list but are noted herein may be the trademarks of their respective owners. For technical details and detailed procedures of the specifications provided in this document please contact your Tecan representative.

Tecan is in major countries a registered trademark of Tecan Group Ltd., Männedorf, Switzerland.

© 2025 Tecan Trading AG, Switzerland, all rights reserved.

www.tecan.com

