

Olink® Target 48 Neurodegeneration

# Clarity in complexity

Absolute quantification. Key markers. Profound insights.

# Bridging the gap between discovery and clinical translation

Biomarker discovery has outpaced translation. To move the most promising candidates forward, researchers need high-performing, robust tools that offer precision, scale, and confidence.

That is why Olink has worked with global neuroscience researchers and specialists to develop our latest panel designed to bridge the gap in neurodegenerative disease research insights to clinical translation.

## Introducing a smarter panel for neurodegeneration research: Olink Target 48 Neurodegeneration

This innovative tool delivers simultaneous measurement of 42 key and emerging proteins for neurodegeneration research, offering absolute quantification and optimized for plasma measurement.



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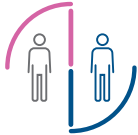
“There is a critical need for a tool that enables the detection of key neurodegenerative disease biomarkers from plasma samples to enhance analysis of patient material within clinical trials. A high-performance absolute quantification solution is urgently required to ensure precise, reliable, and reproducible results across and within longitudinal studies.”

- KOL advisor

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# Turning complex disease into actionable insights

## Empowering decisions across applications in neurodegeneration research



### Supporting clinical trials

Absolute quantification of key and emerging markers helps guide different stages of clinical trials, by helping understand target engagement, treatment response and side effects.



### Guiding early detection

Mechanistic breadth with data in absolute quantification that allows for comparisons across time, cohorts, and diverse populations, and validation across collaborations, thereby enabling previously inaccessible insights into early pathology and advancing biomarker candidates in a global context.



### Understanding disease progression

Measuring key and emerging biomarkers within a single run yields novel insights into disease progression, while the pg/mL readout allows for robust monitoring across patient trajectories over time.



### Speeding up drug development

Measuring 42 key and emerging biomarkers in one run accelerates the transition from early to late phases in drug & diagnostics co-development programs by enabling faster, better-informed decisions when validating exploratory biomarker hypotheses.



### Disease type and subtype differentiation

Curated biomarker content spanning neuroinflammation, synaptic function, and clearance provides mechanistic breadth to support defining disease types and subtypes, as well as to guide patient stratification.

“The Target 48 Neuro panel delivers reliable and reproducible data for both established and emerging neurodegenerative biomarkers in plasma and CSF, with absolute quantification. This makes this new panel an essential tool for advancing biomarker research for diverse neurodegenerative dementias.”

**Charlotte Teunissen, Professor in neurochemistry, Department of Laboratory Medicine, Amsterdam University Medical Center**

# One panel designed to deliver insights previously out of reach



## Absolute quantification

Gain previously inaccessible insights with absolute quantification



## Profound insights

Dive into disease complexity with mechanistic breadth



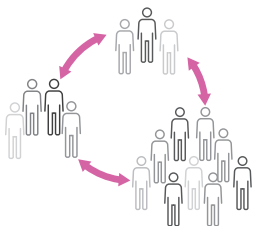
## Key markers

Confidently track key neurodegeneration biomarkers—all in one panel

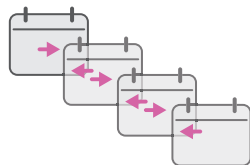
# Clarity in complexity

## Built-in absolute quantification for data that drives decisions

Generate consistent pg/mL results—across time points, sites, studies, and collaborators



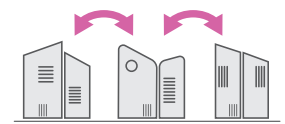
Across cohorts



Across timepoints



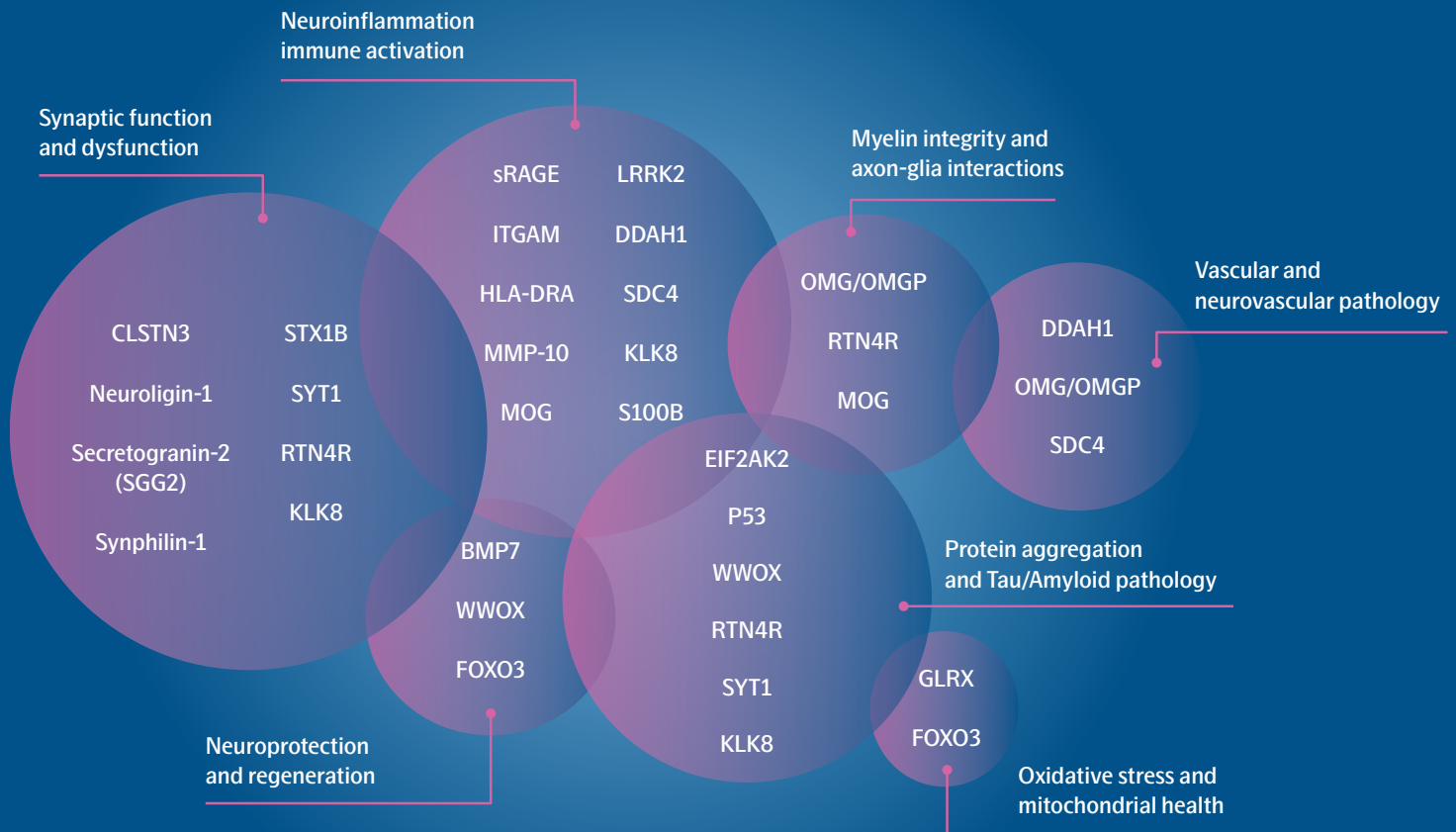
Between disease sub-types, stages, and treatments



Across labs and projects

# Every biomarker selected for relevance and performance

Designed in partnership with field specialists, biobanks, and publications to prioritize markers with translational potential, Target 48 Neurodegeneration panel covers mechanisms critical to interrogating early disease stages and progression such as Alzheimer's, Parkinsons, and multiple sclerosis early disease stages and progression.



## Biomarkers curated with purpose and impact

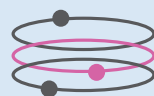
A rigorous biomarker selection process ensures translational relevance and scientific precision



Specialist interviews



Publication review



Database analyses  
(including UKB)



Final list of validated  
biomarkers

# Transparent verification turning mechanistic breadth into robust insights

Explore neurodegeneration through the lenses of inflammation, synaptic function, clearance, and vascular health — backed by thorough analytical verification and absolute quantification. The Target 48 Neurodegeneration panel was purpose-built for plasma — developed without any human plasma components, and tested in CSF and serum. The result is a panel that delivers true mechanistic breadth by combining both key and emerging markers in a single solution — without compromising assay performance.

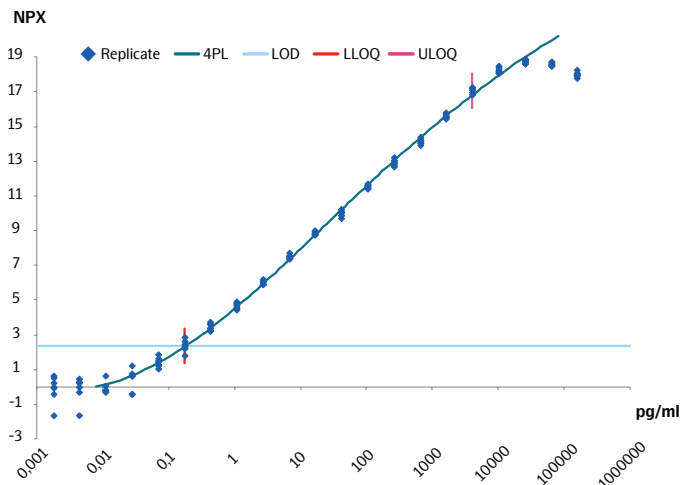


Figure 1. 24-point calibrator curve of pTau217.

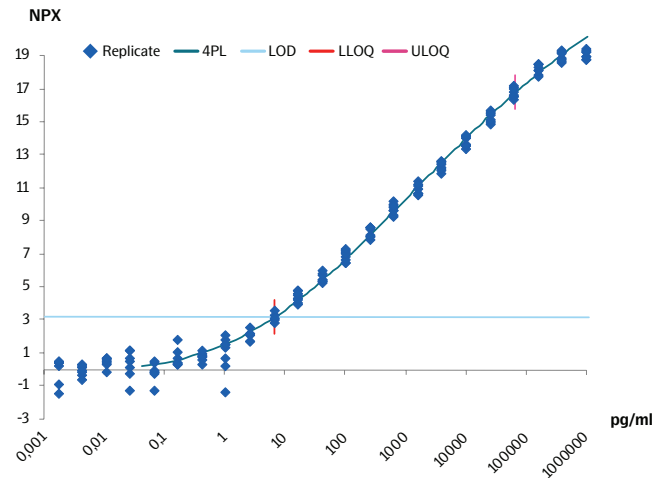


Figure 2. 24-point calibrator curve of GFAP.

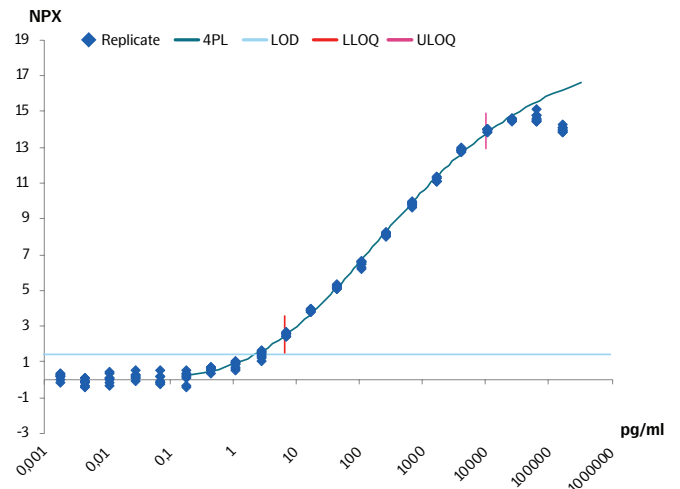


Figure 3. 24-point calibrator curve of SYT1.

## Synaptic function

NPTX1 NPTX2  
 NPTXR SMOC1  
 CLSTN3 STX1B  
 DDC SYT1  
 GLRX  
 NLGN1

## Neurodegeneration

pTau217 RTN4R  
 Amyloid  $\beta$  42 VSNL1  
 Amyloid  $\beta$  40 WWOX  
 NfL MOG  
 GDNF OMG  
 BMP7 EIF2AK2  
 NGF S100B

## Clearance

LRRK2 ENO2  
 SCG2 KLK8  
 BACE1 SNCAIP  
 DDAH1 TP53

## Vascular function

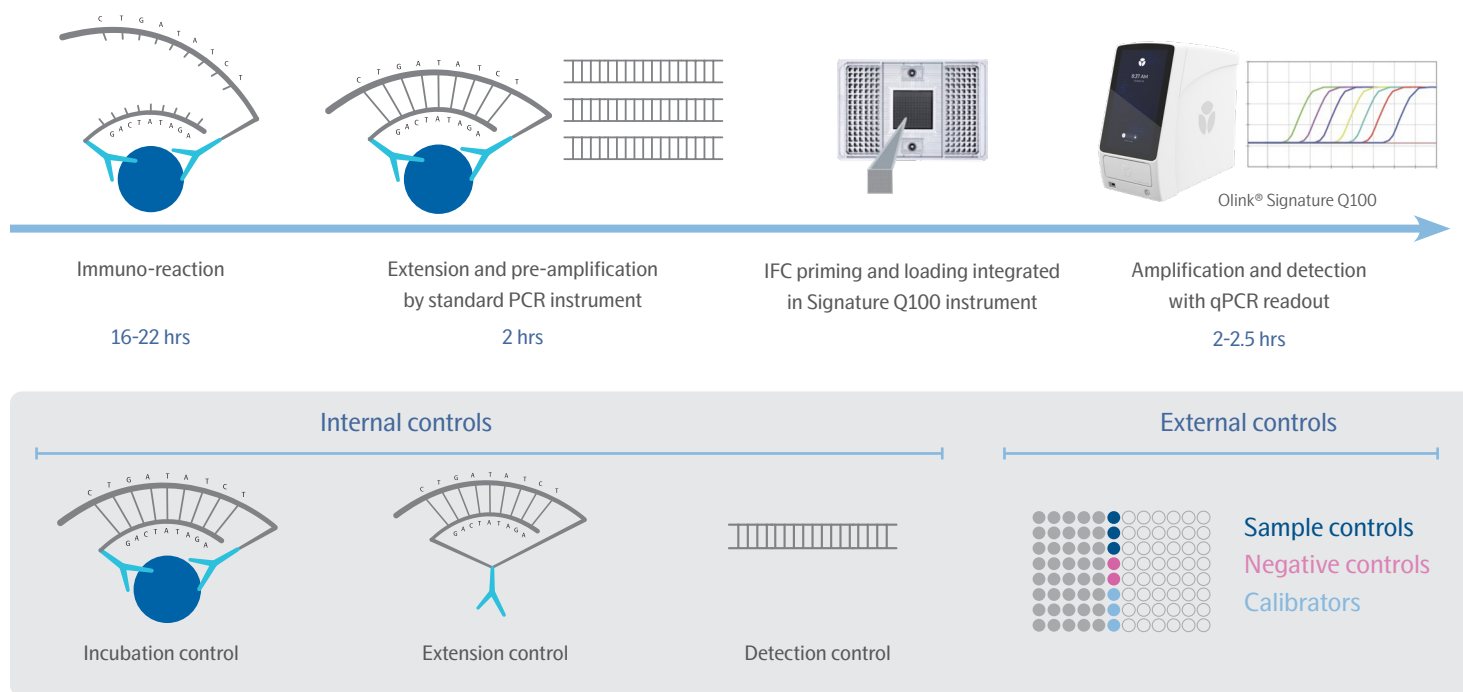
SDC4  
 ITGAM  
 ITGB2

## Neuroinflammation

AGER  
 FOXO3  
 GFAP  
 HLA-DRA  
 MMP10  
 TREM1  
 TREM2

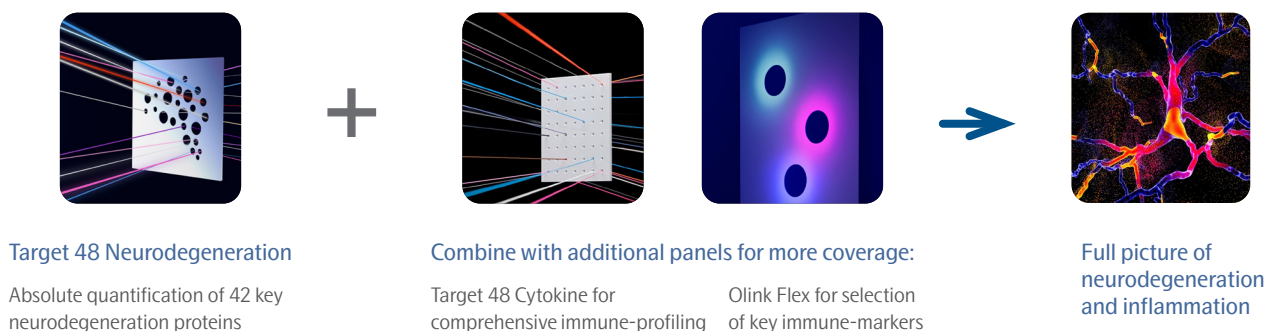
# Streamlined workflow ensures high-quality results every time

Our streamlined PEA™-based workflow ensures precision without complexity, using just 1 µL of plasma or CSF. Olink® assays deliver confident results with built-in quality control that tracks every step of the Proximity Extension Assay. This ensures reliable singlicate measurements, minimizes technical variation, and streamlines downstream analysis. Paired with the Olink® Signature Q100 benchtop system, you get a simplified workflow with no washing steps, minimal maintenance, and seamless QC and normalization through NPX™ Signature software.



## Extend your insight, not your effort

For deeper immune profiling, combine Target 48 Neurodegeneration with Target 48 Cytokine or Flex panels on the same platform—up to 87 markers in one run, one sample, one workflow. For added flexibility, Olink® Flex lets you design panels with 5–30 key immune markers. All assays run on the same platform, delivering precise absolute quantification—giving you flexibility without compromising consistency.



# The power of **one** panel

Less sample. Less time. Less cost. More insight.

## Key benefits:

- Run key and emerging markers in one panel
- Avoid having to run multiple panels
- Save precious CSF or plasma
- Make reproducible comparisons with precise absolute quantification

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“This tool can save us so much work, money, and spare our samples from multiple analyses on different platforms.”

-PI, Leading Lab

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Learn more at [olink.com/Target48neurodegeneration](https://olink.com/Target48neurodegeneration)