# Introducing Olink® Flex: Inflammation in aging panel

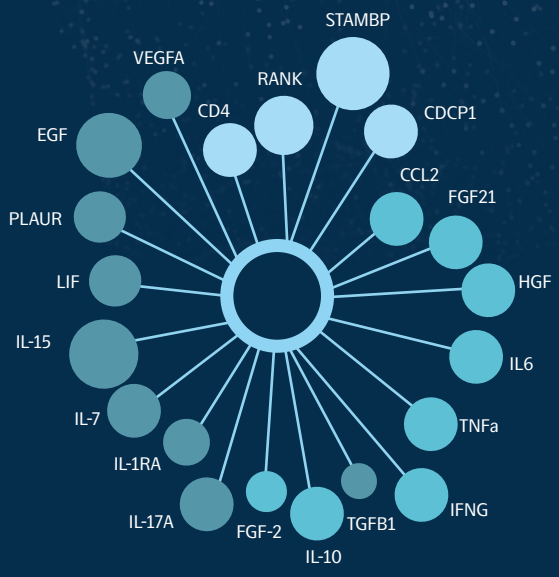
## Uncovering biological aging mechanisms through circulating biomarker profiling

The pathophysiology of biological aging is an expanding area of research with a growing interest in identifying biomarkers of aging-related conditions. Biological aging clocks are well-established as more accurate tools for monitoring age-related physiological decline rates compared to chronological age assessment.

A key strategy for the development of aging clocks includes evaluating related proteome changes through circulating biomarker profiling. This offers real-time insights into the physiology of aging, which is hallmarked by an altered expression of senescence- and inflammation-related proteins.

For example, plasma levels of immune-related proteins such as CDCP1 and HGF have been shown to provide a link between inflammatory nutritional patterns and future cognitive impairment.

A longitudinal study on aging-driven frailty progression also used plasma proteomics to identify a set of core proteins, including CD4 and RANK, as crucial for understanding the pathomechanisms of this condition.




The Olink Flex Inflammation in aging panel includes 21 protein biomarkers linked to age-related changes of the immune system, including CDCP1, STAMBP, RANK and PLAUR. These biomarkers may provide deeper insights into age-related inflammation and lead to improved stratification and treatment of individuals at higher risk of developing aging-related diseases and functional decline.

## Key publications:


→ Duggan M.R. et al. Plasma proteins related to inflammatory diet predict future cognitive impairment. Mol Psychiatry (2023)

→ Cedeno-Veloz, B. et al. Serum biomarkers related to frailty predict negative outcomes in older adults with hip fracture. J Endocrinol Invest (2023).

→ Mitchell, A. et al. Pro-Inflammatory Proteins Associated with Frailty and Its Progression—A Longitudinal Study in Community-Dwelling Women. J Bone Miner Res (2023)

→ Llaurador-Coll M. et al. Plasma levels of neurology-related proteins are associated with cognitive performance in an older population with overweight/obesity and metabolic syndrome. Geroscience (2023)


## Need more flexibility?

Olink® Flex allows you to optimize this panel with other validated assays from the Flex library or to build an entirely new panel that fits your research interests. Try the Flex panel builder on Olink® Insight now!



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