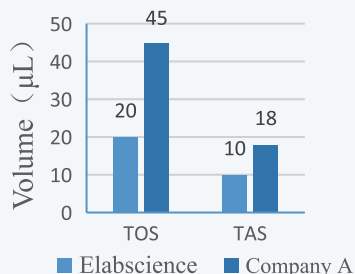


From Biomarkers to Breakthroughs: TAS & TOS for Oxidative Health

Features of Elabscience® TAS & TOS Assay Kits

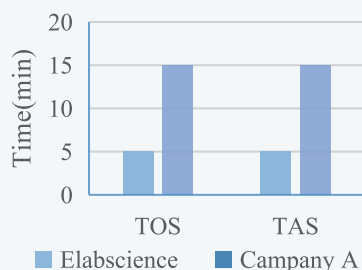
Minimal Sample Volume

Only 30 μL of sample required for both TAS and TOS measurements



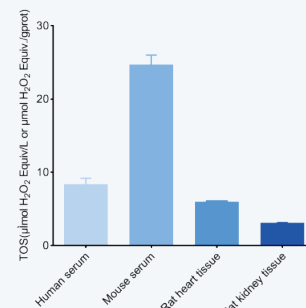
Rapid Results

Reaction time of just 5 min per assay



Versatile Applications

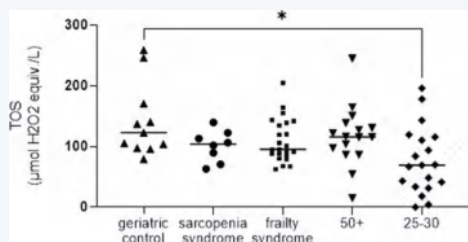
Validated for serum and tissue samples



Research Applications

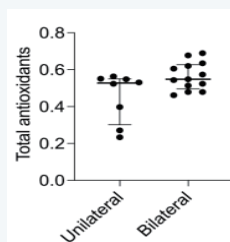
Elabscience® TAS and TOS kits are driving breakthroughs in:

- Aging & Sarcopenia:** Unraveling the role of oxidative stress in frailty and muscle atrophy.
- Neurodegeneration:** Investigating redox imbalance in Alzheimer's and other neurological disorders.
- Metabolic Diseases:** Exploring oxidative mechanisms in diabetes and acute kidney injury.
- Inflammation & Autophagy:** Deciphering the interplay between oxidative stress and cellular repair processes.



The comparison of TOS between five study groups

Research Direction: Aging
Sample: Human serum



TAS levels across disease severity indicators

Research Direction: Pulmonary Tuberculosis
Sample: Human serum

Featured Citation Referencing Elabscience® Kits

Cited in high-impact studies across diverse fields, including aging, neurodegeneration, diabetes, and inflammation.

- ① Kmiołek, Tomasz et al. (2023):
Examined global DNA methylation, telomere shortening, and oxidative status in sarcopenia and frailty.
- ② Zhao, Xingtao et al. (2022):
Demonstrated quercetin's role in mitigating ethanol-induced hepatocyte pyroptosis via oxidative balance.
- ③ Carreto-Binaghi, Laura E. et al. (2023):
Linked serum oxidative biomarkers to quality-of-life improvements in pulmonary tuberculosis.
- ④ Guler, Ayşenur et al. (2024):
Utilized machine learning and oxidative markers to study antifungal mechanisms in yeast cells.
- ⑤ Šošić-Jurjević, Branka et al. (2024):
Highlighted the antioxidant benefits of lemon flavonoid extract in aged rats.

Explore our Oxidative Stress Portfolio

Enhance your research with Elabscience®'s comprehensive range of oxidative stress assays:

Marker	Cat. No.	Product Name
TAS	E-BC-K801-M	Total antioxidant status (TAS) Colorimetric Assay Kit
TOS	E-BC-K802-M	Total oxidation status (TOS) Colorimetric Assay Kit
SOD	E-BC-K020-M	Total Superoxide Dismutase (SOD) Colorimetric Assay Kit (WST-1 method)
MDA	E-BC-K025-M	Malondialdehyde (MDA) Colorimetric Assay Kit (TBA method)
ROS	E-BC-K138-F	Reactive Oxygen Species (ROS) Fluorometric Assay Kit (Green)
-OH	E-BC-K527-M	Hydroxyl Free Radical Scavenging Capacity Assay Kit
GSH	E-BC-K030-M	Reduced Glutathione (GSH) Colorimetric Assay Kit
CAT	E-BC-K031-M	Catalase (CAT) Activity Assay Kit
GPX	E-BC-K096-M	Glutathione Peroxidase (GSH-Px) Activity Assay Kit

For more products, please visit www.elabscience.com or contact local distributors.



Empower your Research with Precision and Innovation

Elabscience® is committed to providing reliable, high-performance tools to advance your oxidative stress studies. Discover the difference with our TAS and TOS Assay Kits—your gateway to unlocking the complexities of redox biology.

Elabscience Bionovation Inc.

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