



1

SECTION 1 ANTIOXIDANTS

Antioxidant Controls

Antioxidant quality controls in diagnostics are crucial for ensuring the accuracy and reliability of tests that measure oxidative stress and antioxidant levels in biological samples. These quality controls are used to validate the performance of diagnostic assays, ensuring that the test results are consistent and accurate. Positive controls, which contain known quantities of antioxidants, help confirm that the assay is working correctly, while negative controls, without antioxidants, ensure there is no false detection of antioxidant activity.

By using antioxidant controls, laboratories can detect any potential issues with the assay, such as reagent degradation or equipment malfunction. In addition to positive and negative controls, diagnostic assays may also use blank and solvent controls to account for any potential interference from other substances or experimental factors. Consistent use of antioxidant quality controls helps to standardize the measurement of oxidative stress biomarkers, ensuring that results are comparable across different laboratories and studies. These controls are critical in clinical diagnostics, where accurate measurements of antioxidant levels can be used for disease risk assessment, monitoring therapeutic responses, and guiding treatment decisions, particularly in conditions like cardiovascular diseases, diabetes, and neurodegenerative disorders.

The Fortress Seraqual Antioxidant Quality Controls are lyophilised for enhanced stability, offer excellent accuracy and precision and cover a range of key antioxidants in clinical practice. The controls are supplied with instrument and method specific assigned values.



Lyophilised



Liquid Frozen



Liquid Stable



100% Human Serum



Assayed Target Values Provided

Glutathione Peroxidase Control

- This control is presented in a Lyophilised format stable to expiry date at 2-8 °C.
- Reconstituted stability 3 days at 2-8 °C.
- 100% Human serum based.

Description	Size	Cat No.	Type
Glutathione Peroxidase Control	5 x 1 ml	BXC0556A	Lyo

Glutathione Reductase Calibrator & Control

- Fortress Glutathione Reductase Controls are intended for monitoring accuracy and precision.
- Calibrators and Controls are supplied in a Lyophilised format stable up to expiry at 2-8 °C.
- Reconstituted stability 7 days at 2-8 °C or 3 days at 25 °C.
- 100% Human serum based.

Description	Size	Cat No.	Type
Glutathione Reductase Calibrator	5 x 1 ml	BXC0999A	Lyo
Glutathione Reductase Control	5 x 1 ml	BXC0460A	Lyo

Superoxide Dismutase Control

- The Control is presented in Lyophilised format stable to expiry date at 2-8 °C.
- Reconstituted stability of 7 days at 2-8 °C.
- 100% Human serum based.

Description	Size	Cat No.	Type
Superoxide Dismutase Control	5 x 1 ml	BXC0433A	Lyo

Total Antioxidant Status Calibrator & Control

- 100% Human serum based.
- Reconstituted stability of 7 days at 2-8 °C.

Description	Size	Cat No.	Type
Total Antioxidant Status (TAS) Calibrator	1 x 1 ml	BXC0555A	Lyo
Total Antioxidant Status (TAS) Control	5 x 5 ml	BXC0554A	Lyo