

Glutathione oxidized

Cell Culture Tested

Product Code: TC282

Product Description:

Molecular weight: 612.63

Molecular formula: $C_{20}H_{32}N_6O_{12}S_2$

CAS No.: 27025-41-8

Synonyms: GSSG

Glutathione is a tripeptide composed of three amino acids glutamate, cysteine and glycine. The importance of its function in the body is highlighted by the fact that it is found in virtually every cell of the body. Glutathione oxidized, or GSSG, is the dimeric form of glutathione which constitutes less than 10% of the total glutathione pool in healthy cells and tissues.

Glutathione protects the cells from oxidative damage by reducing free radicals and reactive oxidation species. It is also involved in the mechanism of cell detoxification. The ratio of GSH to GSSG is an indicator of cellular health.

Under normal culture conditions, oxidized glutathione is rapidly converted to the reduced form by cellular glutathione reductase. In serum free media, glutathione exists mainly in the oxidized form. It boosts the growth of cells under serum free conditions.

Directions:

Preparation instructions:

1. Solutions of the desired concentrations can be prepared in water. Typical working concentration is 0.5mg/L.
2. Solutions can be sterilized by filtering through a sterile membrane filter with a porosity of 0.22 microns or less using positive pressure.

Quality Control:

Appearance

White to off-white crystals or powder

Solubility

Clear colorless solution at 10gm in 1ml of water

FTIR (KBr disc)

Matches with the standard pattern

Water (KF)

NMT 8.0%

Assay

NLT 98.00%

Cell Culture Test

Passes

Storage and Shelf Life:

Store powder at 2-8°C in air-tight container.

Shelf life is 48 months.

Store solutions in tightly capped bottles.

Solutions can be stored at 4°C for up to 7 days and at -20°C for up to one month.

Use before expiry date given on product label.

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Disclaimer:

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