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# Glutathione

National Cancer Institute

## Source

National Cancer Institute. *Glutathione*. NCI Thesaurus. Code C523.

A tripeptide comprised of three amino acids (cysteine, glutamic acid, and glycine) present in most mammalian tissue. Glutathione acts as an antioxidant, a free radical scavenger and a detoxifying agent. Glutathione is also important as a cofactor for the enzyme glutathione peroxidase, in the uptake of amino acids, and in the synthesis of leukotrienes. As a substrate for glutathione S-transferase, this agent reacts with a number of harmful chemical species, such as halides, epoxides and free radicals, to form harmless inactive products. In erythrocytes, these reactions prevent oxidative damage through the reduction of methemoglobin and peroxides. Glutathione is also involved in the formation and maintenance of disulfide bonds in proteins and in the transport of amino acids across cell membranes.