



LKT Laboratories, Inc.

S-(N-Phenylbutylthiocarbamoyl)-glutathione

Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329

Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID P2514

CAS No.

Chemical Name S-(N-Phenylbutylthiocarbamoyl)-glutathione

Synonym Phenylbutylisothiocyanate-glutathione

Formula $C_{21}H_{30}N_4O_6S_2$

Formula Wt. 498.62

Melting Point

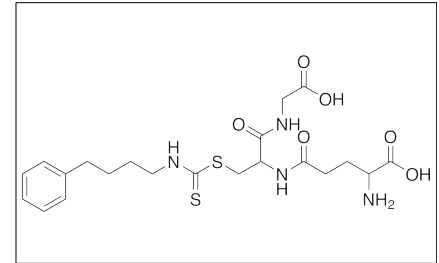
Purity $\geq 98\%$

Solubility

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description S-(N-Phenylbutylthiocarbamoyl)-glutathione (PBITC) is a conjugate of phenylbutylisothiocyanate and glutathione. Isothiocyanates are typically found in plants of the *Brassicaceae* family, including broccoli, cabbage, and radish. Isothiocyanates are best known for their antioxidative, anticancer chemotherapeutic, chemopreventive, anti-angiogenic, and antibiotic properties. In vitro, PBITC increases caspase 3 activity and cleavage of poly(ADP)-ribose polymerase (PARP), inducing caspase-mediated apoptosis. This compound decreases oxidation of carcinogen NNK and increases activity of NADPH:quinone oxidoreductase and glutathione-S-transferase in vitro and in vivo.



Bulk quantities available upon request

Product ID Size

P2514 5 mg

P2514 10 mg

P2514 25 mg

References Son HY, Nishikawa A, Furukawa F, et al. Modifying effects of 4-phenylbutyl isothiocyanate on N-nitrosobis(2-oxopropyl)amine-induced tumorigenesis in hamsters. *Cancer Lett.* 2000 Nov 28;160(2):141-7. PMID: 11053643.

Yu R, Mandlekar S, Harvey KJ, et al. Chemopreventive isothiocyanates induce apoptosis and caspase-3-like protease activity. *Cancer Res.* 1998 Feb 1;58(3):402-8. PMID: 9458080.

Guo Z, Smith TJ, Wang E, et al. Structure-activity relationships of arylalkyl isothiocyanates for the inhibition of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone metabolism and the modulation of xenobiotic-metabolizing enzymes in rats and mice. *Carcinogenesis.* 1993 Jun;14(6):1167-73. PMID: 8508504.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.