

Buthionine Sulfoximine, Inhibits glutathione biosynthesis

 Catalog
 Unit

 TBI4572-100MG
 100 mg

 TBI4572-250MG
 250 mg

Product Details

Formal Name: 2(S)-Amino-4-(S-butylsulfonimidoyl)butanoic acid

 $\textbf{Molecular Formula:} \ C_8H_{18}N_2O_3S$

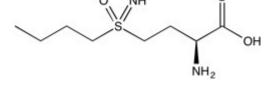
Formula Weight: 222.31 CAS Number: 5072-26-4

Purity: >98%

Formulation: powder

Solubility: Soluble in Water (up to 5 mg/ml).

Storage: -20° C Stability: ≥ 2 years.



Applications

Inhibits glutathione biosynthesis

Functions

D,L-Buthionine sulfoximine is an irreversible inhibitor of γ -glutamylcysteine ligase (GCL). GCL is the first enzyme of the cellular glutathione biosynthetic pathway. Dysregulation of glutathione homeostasis is involved in many diseases including cancer, diabetes, neurodegenerative disorders and HIV/AIDS. Most disease states involve decreased glutathione synthesis, however, in cancer, it is increased supporting cellular proliferation and protecting cancer cells. Pharmacological inhibition of GCL has been examined as a potential cancer treatment.

Application Procedures

First dissolved in Water (up to 5 mg/ml), then diluted to aqueous buffer. Solutions are not stable and must be prepared fresh daily.

For research use only.