

## **L- Buthionine Sulfoximine - CAS 83730-53-4 - Calbiochem**

Art. ID SAF-5082280001  
Unit EA  
Deliverydetails No Dangerous Good /not restricted

### Description

A cell-permeable, sulfoximine based compound that acts a potent, fast acting, irreversible inhibitor of g-glutamylcysteine synthetase and depletes cellular glutathione levels. Closely resembles the structure of g-glutamylphosphate cysteine adduct. The inhibition follows the first order kinetics with  $t_{1/2} = \sim 11$  sec at saturating inhibitor concentration. Does not affect the activity of glutamine synthetase. Shown to improve the outcome of chemotherapy by lowering the levels of glutathione in cancer cells ( $IC_{50} = 1.9, 8.6, \text{ and } 29 \text{ } \mu\text{M}$  in melanoma, breast, and ovarian tumor cells, respectively)., A cell-permeable, sulfoximine based compound that acts a potent, fast acting, irreversible inhibitor of g-glutamylcysteine synthetase and depletes cellular glutathione levels. Closely resembles the structure of g-glutamylphosphate cysteine adduct. The inhibition follows the first order kinetics with  $t_{1/2} = \sim 11$  sec at saturating inhibitor concentration. Does not affect the activity of glutamine synthetase. Shown to improve the outcome of chemotherapy by lowering the levels of glutathione in cancer cells ( $IC_{50} = 1.9, 8.6, \text{ and } 29 \text{ } \mu\text{M}$  in melanoma, breast, and ovarian tumor cells, respectively).

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	L-Buthionine-(S,R)-sulf oximine	[83730-53-4]				