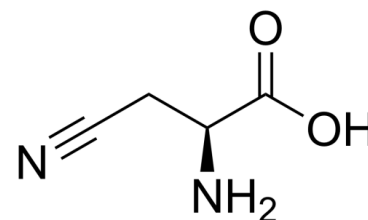


Data Sheet

Product Name:	β-cyano-L-Alanine
Cat. No.:	CS-0099303
CAS No.:	6232-19-5
Molecular Formula:	C ₄ H ₆ N ₂ O ₂
Molecular Weight:	114.10
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Solubility:	H ₂ O : 20.83 mg/mL (182.56 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

β-cyano-L-Alanine (Beta-cyano-L-alanine), a nitrile of widespread occurrence in higher plants, is enzymatically produced by cyanoalanine synthase from cyanide and cysteine as substrates^[1]. β-cyano-L-Alanine abolishes the protective effect of ethanol on cerebral ischemia/reperfusion (I/R) injury^[2]. *In Vivo*: β-cyano-L-Alanine (intraperitoneally; 50 mg/kg) abolishes the protective effect of ethanol on cerebral ischemia/reperfusion (I/R) injury.

References:

[1]. Piotrowski M, et al. The Arabidopsis thaliana isogene NIT4 and its orthologs in tobacco encode beta-cyano-L-alanine hydratase/nitrilase. J Med Chem. J Biol Chem. 2001 Jan 26;276(4):2616-21.

[2]. McCarter KD, et al. Influence of low-dose alcohol consumption on post-ischemic inflammation: Role of cystathionine γ-lyase. Alcohol. 2019 May;76:81-89.

CAIndexNames:

L-Alanine, 3-cyano-

SMILES:

N[C@@H](CC#N)C(O)=O

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA