Product Data Sheet

Product Name: DL-Homocysteine thiolactone hydrochloride
Cat. No.: GC30757

Chemical Properties

Cas. No.	6038-19-3		
SMILES	O=C1C(N)CCS1.Cl		
Formula	C_4H_8ClNOS	M.Wt	153.63
Solubility	DMF: 15 mg/ml,DMSO: 30 mg/ml,PBS (pH 7.2): 10 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

DL-Homocysteine thiolactone is a derivative of DL-homocysteine .[1] It inhibits the growth of *B. campestris*, *L. sativa*, and *E. utilis* roots when used at a concentration of 50 ?M.[2] DL-Homocysteine thiolactone (10 ?M) decreases the maximum rate of left ventricular developed pressure, systolic left ventricular pressure, and coronary flow in isolated rat hearts.[3] It induces arteriosclerotic plaque formation in rabbits when administered at a dose of 30 mg/kg for eight weeks.[1] DL-Homocysteine thiolactone has also been used as a precursor in the synthesis of thiolactone-containing monomers for use in polymer-based formaldehyde-scavenging coatings.[4]

1.McCully, K.S., and Wilson, R.B.Homocysteine theory of arteriosclerosisAtherosclerosis22(2)215-227(1975) 2.Inamori, Y., Muro, C., Toyoda, M., et al.Root-growth inhibition by ??-homocysteine thiolactone and its related compoundsBiosci. Biotech. Biochem.59(3)523-525(1995) 3.Zivkovic, V., Jakovljevic, V., Pechanova, O., et al.Effects of DL-homocysteine thiolactone on cardiac contractility, coronary flow, and oxidative stress markers in the isolated rat heart: The role of

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different gasotransmittersBiomed. Res. Int.318471(2013) 4.Resetco, C., Frank, D., Diki?, T., et al.Thiolactone-based polymers for formaldehyde scavenging coatingsEur. Polym. J.82166-174(2016)