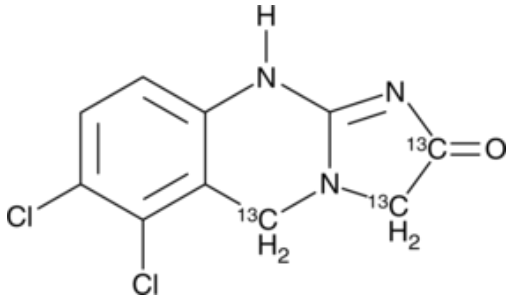
Product Data Sheet

Product Name: Anagrelide-13C3
Cat. No.: GC48870

Chemical Properties

Cas. No.			
SMILES	ClC1=C([13CH2]N([13CH2]2)C(N3)=N[13C]2=O)C3=CC=C1Cl		
Formula	C7[13C]3H7Cl2N3O	M.Wt	259.1
Solubility	DMSO: soluble	Storage	-20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C 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

Anagrelide-$^{13}C_3$ is intended for use as an internal standard for the quantification of anagrelide by GC- or LC-MS. Anagrelide is an inhibitor of phosphodiesterase 3 (PDE3; IC_{50} = 36 nM for the human platelet enzyme).[1] It inhibits thrombopoietin-induced megakaryocytopoiesis of isolated human $CD34^+$ progenitor cells (IC_{50} = 26 nM).[2] Anagrelide reduces platelet aggregation induced by ADP, collagen, thrombin, or arachidonic acid in isolated rabbit platelet rich-plasma (EC_{50}s = 0.31, 0.08, 0.18, and 0.1 µg/ml, respectively).[3] It inhibits platelet thrombus formation in a dog model of electrically induced carotid artery thrombosis when administered at doses ranging from 0.5 to 5 mg/kg.[4] Formulations containing anagrelide have been used in the treatment of thrombocythemia.

1.Wang, G., Franklin, R., Hong, Y., et al.Comparison of the biological activities of anagrelide and its

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major metabolites in haematopoietic cell culturesBr. J. Pharmacol.146(3)324-332(2005) 2.Hong, Y., Wang, G., Gutierrez del Arroyo, A., et al.Comparison between anagrelide and hydroxycarbamide in their activities against haematopoietic progenitor cell growth and differentiation: Selectivity of anagrelide for the megakaryocytic lineageLeukemia20(6)1117-1122(2006) 3.Fleming, J.S., and Buyniski, J.P.A potent new inhibitor of platelet aggregation and experimental thrombosis, anagrelide (BL-4162A)Thromb. Res.15(3-4)373-388(1979) 4.Fleming, J.S., and Buyniski, J.P.AnagrelideNew drugs annual: Cardiovascular drugs277-294(1983)

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