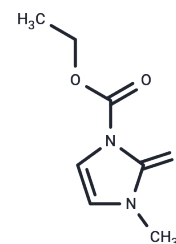


Carbimazole

Chemical Properties

CAS No. :	22232-54-8
Formula:	C7H10N2O2S
Molecular Weight:	186.23
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Carbimazole (Athyromazole) is an Imidazolium thyroid antagonist, which is rapidly transformed into MMI in vivo and can be converted into methidazole in vitro, and can be used in the study of Graves' disease.
Targets(IC50)	p38 MAPK,Thyroid hormone receptor(THR)
In vivo	Once absorbed by the human body, Carbimazole is metabolized into Methimazole, which exerts anti-thyroid activity. It specifically targets conditions such as hyperthyroidism (excessive production of thyroid hormones) and thyrotoxicosis (thyroid inflammation).
Kinase Assay	In vitro kinase assays: with purified proteins, recombinant S6 protein and recombinant active P70S6K are incubated in 1x kinase buffer with various amount of HCQ or RAD001 in the presence (25 μM) or absence of ATP for 30 minutes at 30°C. Total and phosphorylated S6 at ser235/236 and ser240/244 are detected by western analysis using phosphospecific antibodies. Note that recombinant GST-tagged S6 (53 kd) is distinguished from endogenous S6 (32 kd) on the western blot.

Solubility Information

Solubility	Ethanol: 12 mg/mL (64.44 mM),Sonication is recommended. DMSO: 60 mg/mL (322.18 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (10.74 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.3697 mL	26.8485 mL	53.697 mL
5 mM	1.0739 mL	5.3697 mL	10.7394 mL
10 mM	0.537 mL	2.6849 mL	5.3697 mL
50 mM	0.1074 mL	0.537 mL	1.0739 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Taurog A, et al. *Endocrinology*, 1976, 98(4), 1031-1046.

Magnusson RP, et al. *J Biol Chem*, 1984, 259(1), 197-205.

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