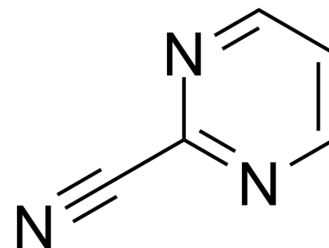


2-Cyanopyrimidine

Cat. No.:	HY-Y0241		
CAS No.:	14080-23-0		
Molecular Formula:	C ₅ H ₃ N ₃		
Molecular Weight:	105.1		
Target:	Cathepsin		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 25 mg/mL (237.87 mM; Need ultrasonic)
 DMSO : < 1 mg/mL (ultrasonic) (insoluble or slightly soluble)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	9.5147 mL	47.5737 mL	95.1475 mL
	5 mM	1.9029 mL	9.5147 mL	19.0295 mL
	10 mM	0.9515 mL	4.7574 mL	9.5147 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	2-Cyanopyrimidine is a potent and non-selective cysteine protease cathepsin K inhibitor with an IC ₅₀ of 170 nM. 2-Cyanopyrimidine is used for osteoporosis ^[1] .
IC₅₀ & Target	IC ₅₀ : 170 nM (cysteine protease cathepsin K) ^[1]
In Vitro	2-Cyanopyrimidine is a 2-cyano-4-cyclohexylamino-pyrimidine derivative. Cathepsin K is a lysosomal cysteine protease ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Altmann E, et al. 2-Cyano-pyrimidines: a new chemotype for inhibitors of the cysteine protease cathepsin K. J Med Chem. 2007 Feb 22;50(4):591-4.

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

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