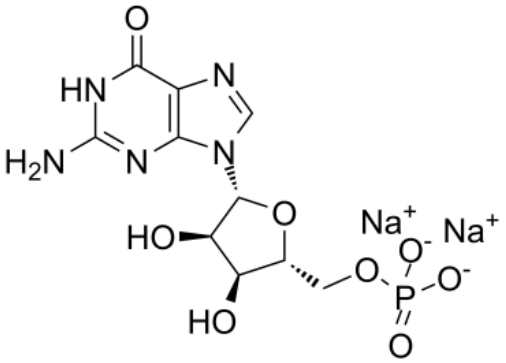
Product Data Sheet

Product Name: 5'-Guanylic acid disodium salt
Cat. No.: GC39330

Chemical Properties

Cas. No.	5550-12-9		
SMILES	O=P([O-])(OC[C@@H]1[C@H]([C@H]([C@H](N2C=NC3=C2N=C(N)NC3=O)O1)O)O)[O-].[Na+].[Na+]		
Formula	$C_{10}H_{12}N_5Na_2O_8P$	M.Wt	407.18
Solubility	Water: 100 mg/mL (245.59 mM); DMSO: < 1 mg/mL (insoluble or slightly soluble)	Storage	Store at -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

5'-Guanylic acid disodium salt (5'-GMP disodium salt) is composed of guanine, ribose, and phosphate moieties and it is a nucleotide monomer in messenger RNA. Guanosine derivatives are involved in intracellular signal transduction and have been identified in repetitive genomic sequences in telomeres, in ribosomal DNA, immunoglobulin heavy-chain switch regions, and in the control

regions of proto-oncogenes[1].

[1]. Lan T, et al. Type II cGMP-dependent protein kinase phosphorylates EGFR at threonine 669 and thereby inhibits its activation. Biochem Biophys Res Commun. 2019 Aug 6.