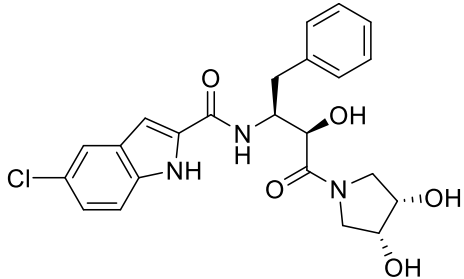


Product data sheet



MedKoo Cat#: 525286 Name: Inglistorib CAS: 186392-65-4 Chemical Formula: C ₂₃ H ₂₄ ClN ₃ O ₅ Exact Mass: 457.1404 Molecular Weight: 457.911	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Inglistorib, also known as CP-368296, is a novel glycogen phosphorylase inhibitor. Inglistorib has antihyperglycemic and cardioprotective properties. Inglistorib inhibits glycogen phosphorylase, the rate-limiting enzyme in glycogenolysis, thereby preventing the release of glucose-1 phosphate from a glycogen molecule in liver. This agent also inhibits glycogen phosphorylase in cardiac muscle and may protect the heart from myocardial ischemic injury by preserving glycogen content and improving glycolytic-oxidative coupling.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	130.0	283.90

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.18 mL	10.92 mL	21.84 mL
5 mM	0.44 mL	2.18 mL	4.37 mL
10 mM	0.22 mL	1.09 mL	2.18 mL
50 mM	0.04 mL	0.22 mL	0.44 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

1. Tracey WR, Treadway JL, Magee WP, Sutt JC, McPherson RK, Levy CB, Wilder DE, Yu LJ, Chen Y, Shanker RM, Mutchler AK, Smith AH, Flynn DM, Knight DR. Cardioprotective effects of inglistorib, a novel glycogen phosphorylase inhibitor. *Am J Physiol Heart Circ Physiol*. 2004 Mar;286(3):H1177-84. doi: 10.1152/ajpheart.00652.2003. Epub 2003 Nov 13. PMID: 14615278.

7. Bioactivity

Biological target:

Inglistorib (CP 368296) is a glycogen phosphorylase inhibitor, with IC₅₀s of 52, 352 and 150 nM for liver, muscle and brain glycogen phosphorylase, and has cardioprotective activity.

In vitro activity

TBD

Product data sheet



In vivo activity

In open-chest anesthetized rabbits, a dose of ingliforib (15 mg/kg loading dose; 23 mg.kg(-1).h(-1) infusion) selected to achieve a free plasma concentration equivalent to an estimated EC(50) in the isolated hearts (1.2 microM, 0.55 microg/ml) significantly reduced infarct size by 52%, and reduced plasma glucose and lactate concentrations.

Reference: Am J Physiol Heart Circ Physiol. 2004 Mar;286(3):H1177-84. <https://pubmed.ncbi.nlm.nih.gov/14615278/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.