# Data Sheet (Cat.No.T16790)



## Rotigaptide

### **Chemical Properties**

CAS No.: 355151-12-1

Formula: C28H39N7O9

Molecular Weight: 617.65

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

# **Biological Description**

Description	Rotigaptide is a novel and specific modulator of Cx43 and is a potent AAP. Rotigaptide prevents the uncoupling of Cx43-mediated gap junction communication and normalized cell-to-cell communication during acute metabolic stress.	
Targets(IC50)	Others	
In vitro	Rotigaptide (100 nM; 24 hours) does not affect INS-1 cell apoptosis itself. Rotigaptide (100 nM; 24 hours) has a positive effect on the cycloheximide-mediated decrease in Cx43 protein levels in cultured neonatal ventricular myocytes. And it obviously decreases apoptosis in cytokine-exposed cells ~10% at IL-1b concentrations above 15 pg/ml in rat insulin-producing INS-1 cells [1][2].	
In vivo	Rotigaptide (intravenous administration; 300 mg/kg; single dose) treatment in mice and rats does not cause toxicity in either species. Rotigaptide (continuous intravenous infusion; 5-14 days) in rats (100 mg/kg) and dogs (10 mg/kg) is well tolerated and produces no compound-related effects or histological toxicological findings in escalating dose studies [3].	

### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.619 mL	8.0952 mL	16.1904 mL
5 mM	0.3238 mL	1.619 mL	3.2381 mL
10 mM	0.1619 mL	0.8095 mL	1.619 mL
50 mM	0.0324 mL	0.1619 mL	0.3238 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.

#### Reference

Seyed Mojtaba Ghiasi, et al. The connexin 43 regulator Rotigaptide reduces cytokine-induced cell death in human islets

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