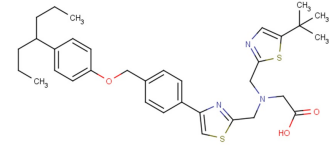


## Data Sheet (Cat.No.T11730)

JTT 551

### Chemical Properties

CAS No.:	776309-04-7
Formula:	C34H43N3O3S2
Molecular Weight:	605.85
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



### Biological Description

Description	JTT 551 can be used in the research of type 2 diabetes mellitus. JTT 551 is selective a protein tyrosine phosphatase 1B (PTP1B) inhibitor, with Kis of 0.22 $\mu$ M and 9.3 $\mu$ M for PTP1B and TCPTP (T-cell protein tyrosine phosphatase), respectively.
Targets(IC <sub>50</sub> )	PTP1B: 0.22 $\mu$ M TCPTP: 9.3 $\mu$ M
In vitro	JTT 551 shows low affinity at CD45 PTP (CD45) and leucocyte common antigen-related (LAR) PTP with Kis of both >30 $\mu$ M. Furthermore, JTT-551 (10 and 30 $\mu$ M) enhances the insulin-induced deoxyglucose uptake in a dosedependent manner. JTT 551 is selective a protein tyrosine phosphatase 1B (PTP1B) inhibitor, with Kis of 0.22 $\mu$ M and 9.3 $\mu$ M for PTP1B and TCPTP (T-cell protein tyrosine phosphatase), respectively.
In vivo	JTT 551 also significantly reduces triglyceride (TG) level at 30 mg/kg on Day 7 but does not alter insulin and total cholesterol (TC) levels. JTT 551 (3 mg/kg, 30 mg/kg, p.o.) dose-dependently decreases blood glucose level on Days 7, 14 and 28 in db/db Mice.

### Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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#### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.651 mL	8.253 mL	16.506 mL
5 mM	0.33 mL	1.651 mL	3.301 mL
10 mM	0.165 mL	0.825 mL	1.651 mL
50 mM	0.033 mL	0.165 mL	0.33 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

1. Fukuda S, et al. Pharmacological profiles of a novel protein tyrosine phosphatase 1B inhibitor, JTT-55Diabetes Obes Metab. 2010 Apr;12(4):299-306.

Inhibitors · Natural Compounds · Compound Libraries

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