## Data Sheet (Cat.No.T16572)



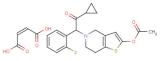
#### Prasugrel (Maleic acid)

### **Chemical Properties**

CAS No.: 389574-20-3
Formula: C24H24FNO7S

Molecular Weight: 489.51
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	Prasugrel Maleic acid is an orally active and potent P2Y12 receptor antagonist and inhibits ADP-induced platelet aggregation. Prasugrel Maleic acid is a thienopyridine and prodrug. Prasugrel Maleic acid also inhibits platelet function.		
Targets(IC <sub>50</sub> )	P2Y12 receptor: None		
In vitro	Prasugrel hydrochloride is an inactive prodrug that requires metabolic processing in vivo to generate the active antiplatelet metabolite. Prasugrel Maleic acid is rapidly absorbed from the gut. Prasugrel Maleic acid active metabolite inhibits in vitro platelet aggregation induced by adenosine ADP ( $10\mu M$ ) (IC50: $1.8 \mu M$ ), in rat platelets. Prasugrel Maleic acid acts faster and is significantly more effective than Clopidogrel in vivo. After oral administration of standard-loading doses of 60 mg, maximum plasma levels of the active metabolite are achieved within 1 h, effective, maximum inhibition of platelet aggregation at 1-2 h[1][2].		

# **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	2.043 mL	10.214 mL	20.429 mL
5 mM	0.409 mL	2.043 mL	4.086 mL
10 mM	0.204 mL	1.021 mL	2.043 mL
50 mM	0.041 mL	0.204 mL	0.409 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. Wijeyeratne YD, et al. Anti-platelet therapy: ADP receptor antagonists. Br J Clin Pharmacol. 2011 Oct;72(4):647-57.
- 2. Sugidachi A, et al. The greater in vivo antiplatelet effects of prasugrel as compared to clopidogrel reflect more efficient generation of its active metabolite with similar antiplatelet activity to that of clopidogrel's active metabolite. J Thromb Haemost. 2007 Jul;5(7):1545-51.

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