Prasugrel (Maleic acid)

Cat. No.: HY-15284B

CAS No.: 389574-20-3

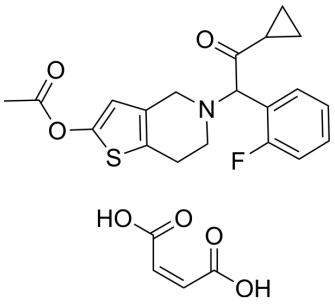
Molecular Formula: $C_{24}H_{24}FNO_7S$

Molecular Weight: 489.51

Target: P2Y Receptor

Pathway: GPCR/G Protein

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Prasugrel (PCR 4099) Maleic acid is a thienopyridine and proagent, inhibits platelet function. Prasugrel Maleic acid is an orally active and potent P2Y12 receptor antagonist, and inhibits ADP-induced platelet aggregation[1].
IC_{50} & Target	P2Y12 Receptor
In Vitro	In rat platelets, Prasugrel (PCR 4099) Maleic acid active metabolite inhibits in vitro platelet aggregation induced by adenosine ADP (10μM) with an IC_{50} value of 1.8 μM[2]. Prasugrel (PCR 4099) Maleic acid acts faster and is significantly more potent than Clopidogrel in vivo. Prasugrel hydrochloride is an inactive prodrug that requires metabolic processing in vivo to generate the active antiplatelet metabolite. Prasugrel (PCR 4099) Maleic acid is rapidly absorbed from the gut. 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]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[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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