

Data Sheet

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Product Name : MRS2578

Cat. No. : PC-43381

CAS No. : 711019-86-2

Molecular Formula : $C_{20}H_{20}N_6S_4$ Molecular Weight : $C_{20}H_{20}N_6S_4$ Target : P2Y Receptor

Solubility : DMSO: ≥ 80 mg/mL

Biological Activity

MRS2578 is a potent, selective **P2Y6** receptor antagonist with IC50 of 37 nM (human) and 101 nM (rat). MRS2578 inhibits the response to 300 nM UDP at the rat P2Y6 receptor expressed in 1321N1 cells in a concentration-dependent manner, with IC50 values of 101 ± 27 nM and 98 ± 11 nM, respectively.

MRS2578 does not affect the UTP (100 nM)-induced responses of cells expressing P2Y2 and P2Y4 receptors as well as P2Y1 and P2Y11 receptor.

MRS2578 completely blocks the protection by UDP of cells undergoing TNF α -induced apoptosis at 1 uM. MRS2578 bolcks ischemia/reperfusion injury in vivo in mouse skeletal muscle by P2Y6 receptor activation.

References

Talasila A, et al. *Br J Pharmacol*. 2009 Sep;158(1):339-53.

Mamedova LK, et al. Biochem Pharmacol. 2004 May 1;67(9):1763-70.

Wihlborg AK, et al. Circ Res. 2006 Apr 14;98(7):970-6.

Mamedova LK, et al. *Pharmacol Res.* 2008 Sep-Oct;58(3-4):232-9.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com