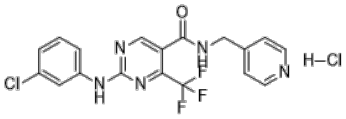
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	GW833972A
Cat. No.	:	PC-26472
CAS No.	:	1092502-33-4
Molecular Formula	:	$C_{18}H_{14}Cl_2F_3N_5O$
Molecular Weight	:	444.24
Target	:	Cannabinoid Receptor
Solubility	:	10 mM in DMSO



Biological Activity

GW833972A is a potent, selective CB2 receptor agonist with pEC50 of 7.3 and 7.5 for human and rat CB2 receptors respecitvely, shows 1000-fold selectivity over CB1 receptor, also binds BMAL2 with high affinity and facilitates its protein degradation.
GW833972A (0.3-300 uM) induced a concentration-dependent inhibition of the guinea-pig vagus nerve activity, stimulated by either capsaicin, hypertonic saline or PGE2.
GW833972A abolished Capsaicin-induced depolarizations at 300 μM with EC50 of 33.9 uM.
GW833972A also inhibited citric acid-induced cough but not plasma extravasation in the guinea-pig and this effect was blocked by a CB2 receptor antagonist.
GW833972A reduced RAD51 expression, leading to an accumulation of DNA damage, decreased cell viability and reduced OCCC tumor growth.
GW833972A enhanced the effectiveness of Poly (ADP-ribose) polymerase inhibitor (PARPi) treatments in BMAL2-expressing OCCC.

References

Belvisi MG, et al. Br J Pharmacol. 2008 Oct;155(4):547-57.

Mlost J, et al. Biomed Pharmacother. 2021 Apr;136:111283.

Tan GYT, et al. EMBO Mol Med. 2026 Apr 3. doi: 10.1038/s44321-026-00414-8.

E-mail: tech@probechem.com