Product Data Sheet

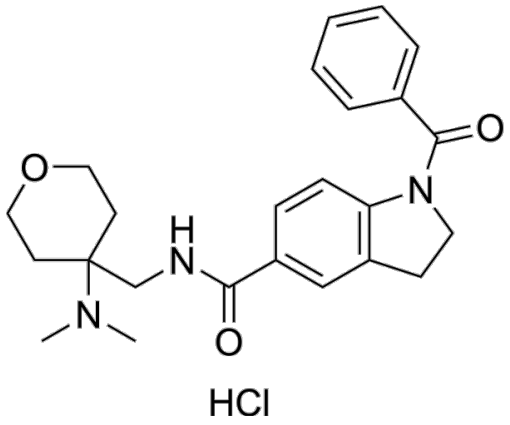
Product Name: RPI-GLYT2-82
Cat. No.: GC79505

Chemical Properties

Cas. No.

Formula	$C_{24}H_{30}ClN_3O_3$	M.Wt	443.97
Solubility	DMSO: 25 mg/mL (56.31 mM; Need ultrasonic)	Storage	Store at 4°C, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

RPI-GLYT2-82 is a reversible, blood-brain barrier-permeable allosteric inhibitor of GlyT2 with an IC_{50} value of 554 nM. RPI-GLYT2-82 also exhibits inhibitory activity against 5-HT2AR and SERT, with IC_{50} values of 1.9 μM and 4.7 μM, respectively. RPI-GLYT2-82 inhibits pain signals and alleviates allodynia, shows no target-related side effects at the maximum analgesic dose, and has no addictive potential. RPI-GLYT2-82 can be used for the research of neuropathic pain [1].

In Vivo, RPI-GLYT2-82 (50-150 mg/kg, i.p., single administration) produces dose-dependent

analgesic effects in mouse chronic constriction injury (CCI) and partial sciatic nerve ligation (PSNL) neuropathic pain models[1].

References:

[1]. Cantwell Chater RP, et al. A reversible allosteric inhibitor of GlyT2 alleviates neuropathic pain without on-target side effects. bioRxiv [Preprint]. 2025 Nov 20:2025.04.21.649698.