PRODUCT INFORMATION



PSB-CB5

Item No. 35279

CAS Registry No.: 1627710-30-8

Formal Name: (2Z)-2-[[3-[(4-chlorophenyl)

methoxy|phenyl|methylene|-6,7-

dihydro-5H-imidazo[2,1-b][1,3]

thiazin-3(2H)-one

Synonym: CID-85469571 MF: C20H17CIN2O2S

384.9 FW: **Purity:** ≥95%

 λ_{max} : 220, 251, 378 nm UV/Vis.:

Supplied as: A solid -20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PSB-CB5 is supplied as a solid. A stock solution may be made by dissolving the PSB-CB5 in the solvent of choice, which should be purged with an inert gas. PSB-CB5 is soluble in the organic solvent DMSO at a concentration of approximately 25 mg/ml.

Description

PSB-CB5 is an antagonist of G protein-coupled receptor GPR18 (IC $_{50}$ = 0.279 μ M). It is 36-, 36-, and 14-fold selective for GPR18 over GPR55, cannabinoid 1 (CB₁), and CB₂ receptors, respectively. PSB-CB5 (1 μM) inhibits acrosomal exocytosis induced by the endogenous GPR18 ligand arachidonoyl glycine (NAGly; Item No. 90051) in human spermatozoa.²

References

- 1. Rempel, V., Atzler, K., Behrenswerth, A., et al. Bicyclic imidazole-4-one derivatives: A new class of antagonists for the orphan G protein-coupled receptors GPR18 and GPR55. Med. Chem. Commun. 5, 632-649 (2014).
- 2. Flegl, C., Vogel, F., Hofreuter, A., et al. Characterization of non-olfactory GPCRs in human sperm with a focus on GPR18. Sci Rep. 6, 32255 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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