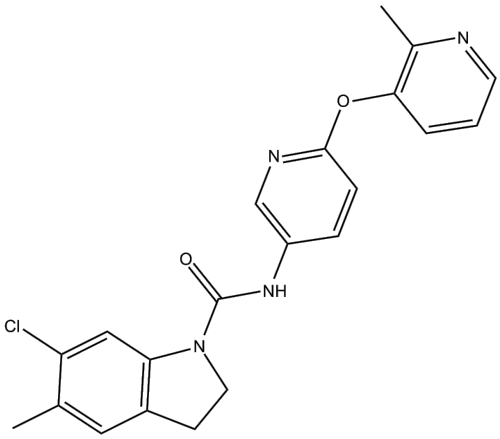
# Product Data Sheet

Product Name: SB 242084
Cat. No.: GC14392

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 181632-25-7 | | |
| Chemical Name | 6-chloro-5-methyl-N-(6-((2-methylpyridin-3-yl)oxy)pyridin-3-yl)indoline-1-carboxamide | | |
| SMILES | CC1=CC2=C(C=C1Cl)N(C(NC3=CN=C(C=C3)OC4=C(C)N=CC=C4)=O)CC2 | | |
| Formula | $C_{21}H_{19}ClN_4O_2$ | M.Wt | 394.85 |
| Solubility | ≥ 39.5mg/mL in DMSO | Storage | Store at -20°C |
| 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

SB 242084 is a 5-HT2C receptor antagonist(pKi=9.0) that displays 158- and 100-fold selectivity over 5-HT2A and 5-HT2B receptors respectively.IC50 value: 9.0(pKi) [1]Target: 5-HT2C antagonistin vitro: SB 242084 had over 100-fold selectivity over a range of other 5-HT, dopamine and adrenergic receptors. In studies of 5-HT-stimulated phosphatidylinositol hydrolysis using SH-SY5Y cells stably expressing the cloned human 5-HT2C receptor, SB 242084 acted as an antagonist with a pKb of 9.3,

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which closely resembled its corresponding receptor binding affinity [1].in vivo: SB 242084 potently inhibited m-chlorophenylpiperazine (mCPP, 7 mgkg i.p. 20 min pre-test)-induced hypolocomotion in rats, a model of in vivo central 5-HT2C receptor function, with an ID50 of 0.11 mg/kg i.p., and 2.0 mg/kg p.o. SB 242084 (0.1-1 mg/kg i.p.) exhibited an anxiolytic-like profile in the rat social interaction test, increasing time spent in social interaction, but having no effect on locomotion. SB 242084 (0.1-1 mg/kg i.p.) also markedly increased punished responding in a rat Geller-Seifter conflict test of anxiety, but had no consistent effect on unpunished responding [1].

References:

[1]. Kennett GA, et al. SB 242084, a selective and brain penetrant 5-HT2C receptor antagonist. Neuropharmacology. 1997 Apr-May;36(4-5):609-20.
[2]. Bromidge SM, et al. 6-Chloro-5-methyl-1-[[2-[(2-methyl-3-pyridyl)oxy]-5-pyridyl]carbamoyl]-indoline (SB-242084): the first selective and brain penetrant 5-HT2C receptor antagonist. J Med Chem. 1997 Oct 24;40(22):3494-6.
[3]. Dalton GL, et al. Serotonin 1B and 2C receptor interactions in the modulation of feeding behaviour in the mouse. Psychopharmacology (Berl). 2006 Mar;185(1):45-57.

***Caution: Product has not been fully validated for medical applications. For research use only.***
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