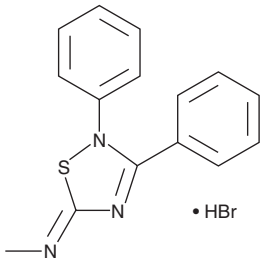
PRODUCT INFORMATION

SCH 202676 (hydrobromide)

Item No. 16945

CAS Registry No.:	265980-25-4
Formal Name:	N-(2,3-diphenyl-1,2,4-thiadiazol-5(2H)-ylidene)-methanamine, monohydrobromide
MF:	$C_{15}H_{13}N_3S \bullet HBr$
FW:	348.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 205, 275 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

SCH 202676 (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the SCH 202676 (hydrobromide) in the solvent of choice, which should be purged with an inert gas. SCH 202676 (hydrobromide) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SCH 202676 (hydrobromide) in these solvents is approximately 10 and 5 mg/ml, respectively.

SCH 202676 (hydrobromide) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SCH 202676 (hydrobromide) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SCH 202676 (hydrobromide) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SCH 202676 is a reversible inhibitor of both agonist and antagonist binding to diverse G protein-coupled receptors (GPCRs).[1] It blocks the binding of radiolabeled ligands to human opioid, adrenergic, muscarinic, dopaminergic, adenosine, and purinergic receptors.[1-3] It displays IC_{50} values of 0.1 to 1.8 µM for modulating ligand binding.[1,2] SCH 202676 may modulate GPCRs *via* thiol modification.[4]

References

1. Fawzi, A.B., Macdonald, D., Benbow, L.L., *et al.* SCH-202676: An allosteric modulator of both agonist and antagonist binding to G protein-coupled receptors. *Mol. Pharmacol.* **59(1)**, 30-37 (2001).
2. Gao, Z.G., Kim, S.K., Ijzerman, A.P., *et al.* Allosteric modulation of the adenosine family of receptors. *Mini Rev. Med. Chem.* **5(6)**, 545-553 (2005).
3. Lanzafame, A. and Christopoulos, A. Investigation of the interaction of a putative allosteric modulator, N-(2,3-diphenyl-1,2,4-thiadiazole-5-(2H)-ylidene) methanamine hydrobromide (SCH-202676), with M_1 muscarinic acetylcholine receptors. *J. Pharmacol. Exp. Ther.* **308(3)**, 830-837 (2004).
4. Lewandowicz, A.M., Vepsäläinen, J., and Laitinen, J.T. The 'allosteric modulator' SCH-202676 disrupts G protein-coupled receptor function via sulphydryl-sensitive mechanisms. *Br. J. Pharmacol.* **147(4)**, 422-429 (2006).

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