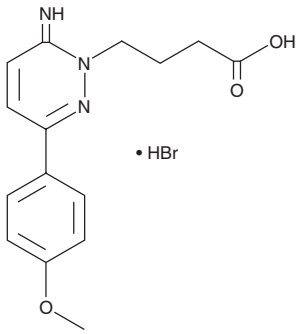
PRODUCT INFORMATION

SR 95531 (hydrobromide)

Item No. 14585

CAS Registry No.:	104104-50-9
Formal Name:	6-imino-3-(4-methoxyphenyl)-1(6H)-pyridazinebutanoic acid, monohydrobromide
Synonym:	Gabazine
MF:	$C_{15}H_{17}N_3O_3$ • HBr
FW:	368.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 283 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

SR 95531 (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the SR 95531 (hydrobromide) in the solvent of choice, which should be purged with an inert gas. SR 95531 (hydrobromide) is soluble in the organic solvent methanol at a concentration of approximately 1 mg/ml.

SR 95531 (hydrobromide) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SR 95531 (hydrobromide) should first be dissolved in methanol and then diluted with the aqueous buffer of choice. SR 95531 (hydrobromide) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of methanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SR 95531 is a derivative of γ-aminobutyric acid (GABA) that acts as an antagonist of GABAA receptors (K_i = 74-150 nM).[1-3] When administered intravenously, it elicits seizures in mice.[1] SR 95531 differs in action from bicuculline (Item No. 11727) in that it antagonizes GABA-induced chloride currents but not those induced by pentobarbitone.[4] It is effective against GABAA receptor isoforms from mice, rats, and humans.[1,2,5]

References

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2. Melikian, A., Schlewer, G., Chambon, J.P., *et al.* Condensation of muscimol or thiomuscimol with aminopyridazines yields GABA-A antagonists. *J. Med. Chem.* **35(22)**, 4092-4097 (1992).
3. Krehan, D., Storustovu, S.í., Liljefors, T., *et al.* Potent 4-arylalkyl-substituted 3-isothiazolol GABAA competitive/noncompetitive antagonists: Synthesis and pharmacology. *J. Med. Chem.* **49(4)**, 1388-1396 (2006).
4. Uchida, I., Cestari, I.N., and Yang, J. The differential antagonism by bicuculline and SR95531 of pentobarbitone-induced currents in cultured hippocampal neurons. *Eur. J. Pharmacol.* **307(1)**, 89-96 (1996).
5. Mendu, S.K., Bhandage, A., Jin, Z., *et al.* Different subtypes of GABA-A receptors are expressed in human, mouse and rat T lymphocytes. *PLoS One* **7(8)**, (2012).

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