

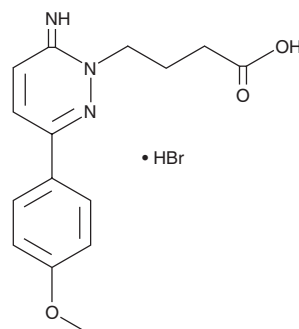
# PRODUCT INFORMATION



## 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:**  $C_{15}H_{17}N_3O_3 \cdot HBr$   
**FW:** 368.2  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 283 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  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  $\gamma$ -aminobutyric acid (GABA) that acts as an antagonist of GABAA receptors ( $K_i = 74$ -150 nM).<sup>1-3</sup> When administered intravenously, it elicits seizures in mice.<sup>1</sup> SR 95531 differs in action from bicuculline (Item No. 11727) in that it antagonizes GABA-induced chloride currents but not those induced by pentobarbitone.<sup>4</sup> It is effective against GABAA receptor isoforms from mice, rats, and humans.<sup>1,2,5</sup>

### References

1. Heaulme, M., Chambon, J.P., Leyris, R., *et al.* Biochemical characterization of the interaction of three pyridazinyl-GABA derivatives with the GABAA receptor site. *Brain Res.* **384(2)**, 224-231 (1986).
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.i., 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).

#### WARNING

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

#### SAFETY DATA

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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