

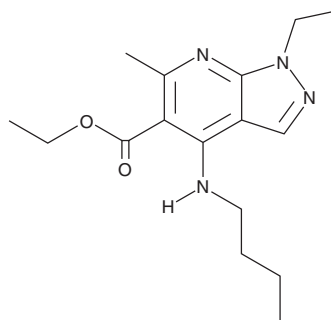
# PRODUCT INFORMATION



## Tracazolate

Item No. 45457

**CAS Registry No.:** 41094-88-6  
**Formal Name:** 4-(butylamino)-1-ethyl-6-methyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylic acid, ethyl ester  
**Synonym:** ICI 136753  
**MF:** C<sub>16</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 304.4  
**Purity:** ≥98%  
**Supplied as:** A 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

Tracazolate is supplied as a solid. A stock solution may be made by dissolving the tracazolate in the solvent of choice, which should be purged with an inert gas. Tracazolate is soluble (≥10 mg/ml) in ethanol.

### Description

Tracazolate is a positive allosteric modulator of the GABA<sub>A</sub> receptor (GABA<sub>A</sub>R).<sup>1</sup> It potentiates GABA-stimulated currents in *X. laevis* oocytes expressing  $\alpha_1\beta_3\gamma_2$ s and  $\alpha_1\beta_1\delta$  subunit-containing GABA<sub>A</sub>Rs (EC<sub>50</sub>s = 1.5 and 16.7  $\mu$ M, respectively) and increases the maximal response to GABA in *X. laevis* oocytes expressing  $\alpha_1\beta_1\delta$  subunit-containing GABA<sub>A</sub>Rs, but reduces the maximal response to GABA in *X. laevis* oocytes expressing  $\alpha_1\beta_3\gamma_2$ s subunit-containing GABA<sub>A</sub>Rs. Tracazolate selectively potentiates GABA-induced currents in *X. laevis* oocytes expressing  $\beta_3$  over  $\beta_1$  subunit-containing GABA<sub>A</sub>Rs (EC<sub>50</sub>s = 1.5 and 13.2  $\mu$ M for  $\alpha_1\beta_3\gamma_2$ s and  $\alpha_1\beta_1\gamma_2$ s subunit-containing GABA<sub>A</sub>Rs, respectively). Tracazolate (5 mg/kg) increases time spent in social interactions but does not reduce locomotor activity, indicating anxiolytic but not sedating activity, in rats.<sup>2</sup>

### References

1. Thompson, S.-A., Wingrove, P.B., Connelly, L., *et al.* Tracazolate reveals a novel type of allosteric interaction with recombinant  $\gamma$ -aminobutyric acid<sub>A</sub> receptors. *Mol. Pharmacol.* **61**(4), 861-869 (2002).
2. File, S.E. and Pellow, S. The anxiolytic but not the sedative properties of tracazolate are reversed by the benzodiazepine receptor antagonist, Ro 15-1788. *Neuropsychobiology* **14**(4), 193-197 (1985).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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