**Product Information**

**Gaboxadol (hydrochloride)**

*Item No. 16355*

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**CAS Registry No.:** 85118-33-8  
**Formal Name:** 4,5,6,7-tetrahydro-isoxazolo[5,4-c]pyridin-3(2H)-one, monohydrochloride  
**Synonym:** THIP  
**MF:** C₆H₈N₂O₂ • HCl  
**FW:** 176.6  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplier as:** A crystalline solid  
**UV/Vis:** λ<sub>max</sub>: 210 nm

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**Laboratory Procedures**

For long-term storage, we suggest that gaboxadol (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Gaboxadol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the gaboxadol (hydrochloride) in the solvent of choice. Gaboxadol (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of gaboxadol (hydrochloride) in these solvents is approximately 20 and 0.1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing physiological experiments. Ensure that the residual amount of organic solvent is insignificant since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of gaboxadol (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of gaboxadol (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Gaboxadol is a GABA<sub>C</sub> receptor agonist whose potency varies depending on the receptor subunit composition (partial agonist at α1β2γ2 (ED<sub>50</sub> = 143 µM), full agonist at α5 (ED<sub>50</sub> = 28-129 µM), and super agonist at α4β3δ (ED<sub>50</sub> = 6 µM)).<sup>1</sup> It also acts as an antagonist at p1 GABA<sub>C</sub> receptors (IC<sub>50</sub> = 25 µM).<sup>1</sup> Gaboxadol has been studied as a non-opioid analgesic and a novel hypnotic agent.<sup>2-4</sup>

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**References**


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**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/16355](http://www.caymanchem.com/catalog/16355)

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**SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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