

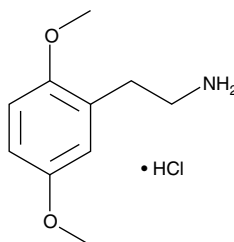
# Product Information



## 2C-H (hydrochloride)

Item No. 11889

**CAS Registry No.:** 3166-74-3  
**Formal Name:** 2,5-dimethoxy-benzeneethanamine, monohydrochloride  
**Synonym:** 2,5-Dimethoxyphenethylamine  
**MF:** C<sub>10</sub>H<sub>15</sub>NO<sub>2</sub> • HCl  
**FW:** 217.7  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 227, 291 nm



### Laboratory Procedures

For long term storage, we suggest that 2C-H (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

2C-H (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the 2C-H (hydrochloride) in the solvent of choice. 2C-H (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2C-H (hydrochloride) in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological 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 2C-H (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2C-H (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

A series of 2,5-phenethylamines, collectively referred to as 2Cs, have psychoactive effects.<sup>1,2</sup> The most effective 2C compounds are 2,5-dimethoxy-4-substituted phenethylamines; many are scheduled as illegal substances.<sup>3,4</sup> 2C-H is described formally as 2,5-dimethoxyphenethylamine. Unlike the 4-substituted 2-C forms, it has little effect on serotonin receptors, activating the 5-HT<sub>2C</sub> receptor to 20% that induced by serotonin (pEC<sub>50</sub> = 5.93).<sup>2</sup> This product is intended for research and forensic applications.

### References

1. Bruno, R., Matthews, A.J., Dunn, M., *et al.* Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug Alcohol Depend.* **124**(1-2), 19-25 (2012).
2. Moya, P.R., Berg, K.A., Gutiérrez-Hernandez, M.A., *et al.* Functional selectivity of hallucinogenic phenethylamine and phenylisopropylamine derivatives at human 5-hydroxytryptamine (5-HT)<sub>2A</sub> and 5-HT<sub>2C</sub> receptors. *J. Pharmacol. Exp. Ther.* **321**, 1054-1061 (2007).
3. Meyer, M.R. and Maurer, H.H. Metabolism of designer drugs of abuse: An updated review. *Curr. Drug Metab.* **11**, 468-482 (2010).
4. Nagai, F., Nonaka, R., and Satoh Hisashi Kamimura, K. The effects of non-medically used psychoactive drugs on monoamine neurotransmission in rat brain. *Eur. J. Pharmacol.* **559**(2-3), 132-137 (2007).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/11889](http://www.caymanchem.com/catalog/11889)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### 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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