

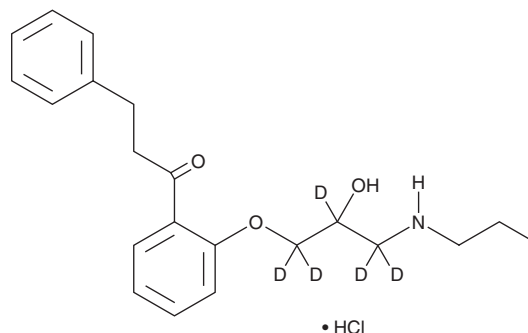
# PRODUCT INFORMATION



## Propafenone-d<sub>5</sub> (hydrochloride)

Item No. 33293

**CAS Registry No.:** 1346605-05-7  
**Formal Name:** 1-(2-(2-hydroxy-3-(propylamino)propoxy-1,1,2,3,3-d<sub>5</sub>)phenyl)-3-phenylpropan-1-one, monohydrochloride  
**MF:** C<sub>21</sub>H<sub>22</sub>D<sub>5</sub>NO<sub>3</sub> • HCl  
**FW:** 382.9  
**Chemical Purity:** ≥98% (Propafenone)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Propafenone-d<sub>5</sub> (hydrochloride) is intended for use as an internal standard for the quantification of propafenone (Item No. 21871) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Propafenone-d<sub>5</sub> (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the propafenone-d<sub>5</sub> (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Propafenone-d<sub>5</sub> (hydrochloride) is soluble in methanol and DMSO.

### Description

Propafenone is a class I antiarrhythmic agent.<sup>1</sup> It inhibits calcium currents (I<sub>Ca</sub>) in isolated guinea pig ventricular myocytes (IC<sub>50</sub> = 5 μM), as well as ATP-sensitive potassium currents (I<sub>KATP</sub>) in isolated rabbit atrial and ventricular monocytes (IC<sub>50</sub>s = 1.26 and 4.94 μM, respectively).<sup>1,2</sup> Propafenone also blocks sodium (I<sub>Na</sub>), potassium (I<sub>K</sub>), and transient outward potassium currents in various cardiac cells.<sup>2-4</sup> *In vivo*, propafenone (2 and 3 mg/kg, i.v.) reverses sinus rhythm in a dog model of barium chloride-induced ventricular arrhythmia.<sup>5</sup> Formulations containing propafenone have been used in the treatment of cardiac arrhythmias.

### References

1. Delgado, C., Tamargo, J., D., H., *et al.* Effects of propafenone on calcium current in guinea-pig ventricular myocytes. *Br. J. Pharmacol.* **108(3)**, 721-727 (1993).
2. Christé, G., Tebbakh, H., Šimurdová, M., *et al.* Propafenone blocks ATP-sensitive K<sup>+</sup> channels in rabbit atrial and ventricular cardiomyocytes. *Eur. J. Pharmacol.* **373(2-3)**, 223-232 (1999).
3. Delpón, E., Valenzuela, C.F., Pérez, O., *et al.* Propafenone preferentially blocks the rapidly activating component of delayed rectifier K<sup>+</sup> current in guinea pig ventricular myocytes. Voltage-independent and time-dependent block of the slowly activating component. *Circ. Res.* **76(2)**, 223-235 (1995).
4. Aoyama, K., Ishikuro, E., Noriduki, H., *et al.* Formation ratios of zearalanone, zearalenols, and zearalanols versus zearalenone during incubation of *Fusarium semitectum* on sorghum and ratios in naturally contaminated sorghum. *Food Hyg. Saf. Sci.* **56(6)**, 247-251 (2015).
5. Germiniani, H. and Germiniani, C. Effect of propafenone hydrochloride in ventricular arrhythmias experimentally induced by barium chloride. *Arq. Bras. Cardiol.* **36(2)**, 101-105 (1981).

#### 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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