

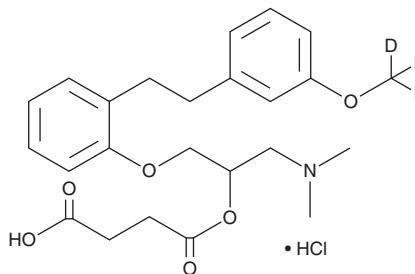
# PRODUCT INFORMATION



## Sarpogrelate-d<sub>3</sub> (hydrochloride)

Item No. 33472

**CAS Registry No.:** 2934185-00-7  
**Formal Name:** butanedioic acid, 1-[2-(dimethylamino)-1-[[2-[2-[3-(methoxy-d<sub>3</sub>)phenyl]ethyl]phenoxy]methyl]ethyl] ester, monohydrochloride  
**MF:** C<sub>24</sub>H<sub>28</sub>D<sub>3</sub>NO<sub>6</sub> • HCl  
**FW:** 469.0  
**Chemical Purity:** ≥98% (Sarpogrelate (hydrochloride))  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>3</sub>); ≤1% d<sub>0</sub>  
**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

Sarpogrelate-d<sub>3</sub> (hydrochloride) is intended for use as an internal standard for the quantification of sarpogrelate (hydrochloride) (Item No. 24194) 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).

Sarpogrelate-d<sub>3</sub> (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the sarpogrelate-d<sub>3</sub> (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Sarpogrelate-d<sub>3</sub> (hydrochloride) is soluble in organic solvents such as methanol and DMSO.

### Description

Sarpogrelate is a selective antagonist of the serotonin (5-HT) receptor subtypes 5-HT<sub>2A</sub>, 5-HT<sub>2B</sub>, and 5-HT<sub>2C</sub> (K<sub>i</sub>s = 3.02, 269, and 37.2 nM, respectively, for human recombinant receptors expressed in CHO-K1 cells).<sup>1</sup> It is selective for 5-HT<sub>2</sub> (K<sub>i</sub> = 70.8 nM) over 5-HT<sub>1</sub> (K<sub>i</sub> = >26,000 nM), α<sub>1</sub>-, α<sub>2</sub>-, and β-adrenergic (K<sub>i</sub>s = 640-123,800 nM), and muscarinic receptors (K<sub>i</sub> = >40,000 nM).<sup>2</sup> *In vitro*, it inhibits aggregation of rat whole blood induced by collagen, 5-HT (Item No. 14332) with collagen, and 5-HT with ADP (Item No. 16778; IC<sub>50</sub>s = 57.7, 0.56, and 22.7 μM, respectively).<sup>3</sup> *In vivo*, it inhibits leukocyte-endothelial interactions in the femoral artery induced by a high-fat high-fructose diet (HFFD) in mice when administered at a dose of 5 mg/kg per day.<sup>4</sup> Sarpogrelate (5 mg/kg per day) decreases ventricular hypertrophy and infarct size in a rat model of myocardial infarction.<sup>5</sup>

### References

1. Rashid, M., Manivet, P., Nishio, H., *et al.* *Life Sci.* **73**(2), 193-207 (2003).
2. Maruyama, K., Kinami, J., Sugita, Y., *et al.* *J. Pharmacobiodyn.* **14**(4), 177-181 (1991).
3. Kubacka, M., Kazek, G., Kotańska, M., *et al.* *Eur. J. Pharmacol.* **818**, 263-270 (2018).
4. Kataoka, H., Ariyama, Y., Deushi, M., *et al.* *PLoS One* **11**(1), e0147929 (2016).
5. Brasil, D., Temsah, R.M., Kumar, K., *et al.* *J. Cardiovasc. Pharmacol. Ther.* **7**(1), 53-59 (2002).

#### 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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