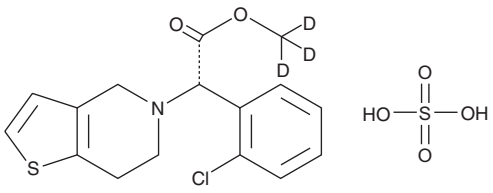
PRODUCT INFORMATION

(S)-(+)-Clopidogrel-d_3 (sulfate)

Item No. 10010673

Formal Name:	methyl-d_3 (S)-2-(2-chlorophenyl)-2-(6,7-dihydrothieno[3,2-c]pyridin-5(4H)-yl)acetate sulfate
MF:	$C_{16}H_{13}ClD_3NO_2S \bullet H_2SO_4$
FW:	422.9
Chemical Purity:	≥98% ((S)-(+)-Clopidogrel (sulfate))
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_3); ≤1% d_0
Supplied as:	A crystalline 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

(S)-(+)-Clopidogrel-d_3 is intended for use as an internal standard for the quantification of (S)-(+)-clopidogrel (Item No. 21002) 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).

(S)-(+)-Clopidogrel-d_3 (sulfate) is supplied as a crystalline solid. A stock solution may be made by dissolving the (S)-(+)-clopidogrel-d_3 (sulfate) in the solvent of choice. (S)-(+)-Clopidogrel-d_3 (sulfate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (S)-(+)-clopidogrel-d_3 (sulfate) in ethanol is approximately 3 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Description

(S)-(+)-Clopidogrel is a prodrug form of the active metabolite of clopidogrel, which is a purinergic $P2Y_{12}$ receptor antagonist.[1] It inhibits aggregation of rat platelets induced by ADP, collagen, or thrombin *ex vivo* (ID_{50}s = 4, 4.8, and 2.9 mg/kg, respectively). (S)-(+)-Clopidogrel increases tail bleeding time in rats in a dose-dependent manner. Formulations containing (S)-(+)-clopidogrel have been used in the treatment of acute coronary syndrome and peripheral artery disease and to reduce the reoccurrence of myocardial infarction and stroke.

Reference

1. Herbert, J., Frehel, D., Vallée, E., *et al.* Clopidogrel, a novel antiplatelet and antithrombotic agent. *Cardiovasc. Drug Rev.* **11(2)**, 180-198 (1993).

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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