PRODUCT INFORMATION



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

Item No. 21002

CAS Registry No.: 120202-66-6

Formal Name: S-α-(2-chlorophenyl)-6,7-dihydro-

thieno[3,2-c]pyridine-5(4H)-acetic acid,

methyl ester, monosulfate

Synonym: SR 25990C

 $C_{16}H_{16}CINO_2S \bullet H_2SO_4$ MF:

FW: 419.9 **Purity:** ≥98%

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.

• H₂SO₄

Laboratory Procedures

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

(S)-(+)-Clopidogrel (sulfate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (S)-(+)-clopidogrel (sulfate) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (S)-(+)-Clopidogrel (sulfate) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(S)-(+)-Clopidogrel is a prodrug form of the active metabolite of clopidogrel, which is a purinergic P2Y₁₂ receptor antagonist. It inhibits aggregation of rat platelets induced by ADP, collagen, and thrombin ex vivo (ID₅₀s = 4, 4.8, and 2.9 mg/kg). (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. Savi, P., Labouret, C., Delesque, N., et al. P2Y₁₂, a new platelet ADP receptor, target of clopidogrel. Biochem. Biophys. Res. Commun. 283(2), 379-383 (2001).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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