



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

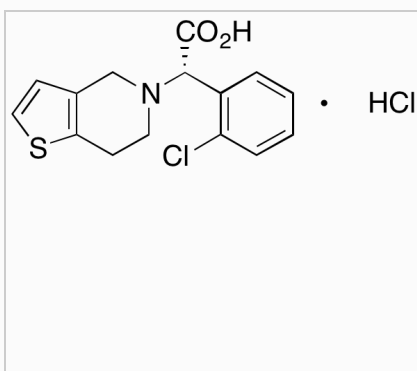
Catalogue Number: C587235

CAS Number: 144750-42-5

Product: Clopidogrel Carboxylic Acid Hydrochloride

Synonym: (S)- α -(2-Chlorophenyl)-6,7-dihydrothieno[3,2-c]pyridine-5(4H)-acetic Acid Hydrochloride; SR 26334 Hydrochloride; Clopidogrel EP Impurity A; Clopidogrel Impurity A; Clopidogrel USP A

Structure:



Molecular Formula:

C₁₅H₁₅Cl₂NO₂S

Molecular weight:

344.26

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly), DMSO (Slightly), Methanol (Slightly)

Lot Number: 2-RIT-52-1

Purity: 97%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1: Hygroscopic

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Off-White to Pale Yellow Solid	Off-White to Pale Yellow Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms

Additional Information: NA

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Eric Beaton	Neha Khanna	Clarissa Santos	3/28/2019	3/26/2026