Ticagrelor
Item No. 15425

CAS Registry No.: 274693-27-5
Formal Name: (1S,2S,3R,5S)-3-[7-[(1R,2S)-2-(3,4-difluorophenyl)cyclopropyl]amino]-5-(propylthio)-3H-1,2,3-triazolo[4,3-d]pyrimidin-3-yl]-5-(2-hydroxyethoxy)-1,2-cyclopentanediol
Synonyms: AR-C 126532XX, AZD 6140, Brilinta®, Brilique™
MF: C23H23F2N2O5S
FW: 522.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \( \lambda_{\text{max}} \): 222, 255, 295 nm

Laboratory Procedures

For long term storage, we suggest that ticagrelor be stored as supplied at -20°C. It should be stable for at least two years. Ticagrelor is supplied as a crystalline solid. A stock solution may be made by dissolving the ticagrelor in the solvent of choice. Ticagrelor is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ticagrelor in these solvents is approximately 15, 20, and 25 mg/ml, respectively.

Ticagrelor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ticagrelor should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ticagrelor has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Ticagrelor is a reversible antagonist of the platelet purinergic P2Y<sub>12</sub> receptor (K<sub>i</sub> = 14 nM; IC<sub>50</sub> = 1.8 μM), which is the main receptor responsible for ADP-induced platelet aggregation. It functions by directly changing the conformation of the P2Y<sub>12</sub> receptor to inhibit ADP binding. Ticagrelor has been studied for its application in antiplatelet therapy to prevent ischemic cardiac complications associated with cardiovascular diseases.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/15425

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**SAFETY DATA**
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eye, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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