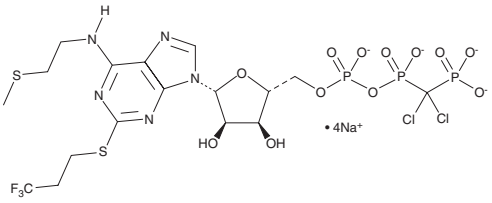
PRODUCT INFORMATION

Cangrelor (sodium salt)

Item No. 22086

CAS Registry No.: 163706-36-3
Formal Name: N-[2-(methylthio)ethyl]-2-[(3,3,3-trifluoropropyl)thio]-5'-adenylic acid, anhydride with P,P'-(dichloromethylene)*bis*[phosphonic acid], tetrasodium salt
Synonym: AR-C69931MX
MF: $C_{17}H_{21}Cl_2F_3N_5O_{12}P_3S_2 \bullet 4Na$
FW: 864.3
Purity: ≥98%
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

Cangrelor (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the cangrelor (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

Cangrelor is an ATP analog that inhibits platelet aggregation (IC_{50} = 0.4 nM).[1] It is a reversible competitive antagonist of the platelet purinergic $P2Y_{12}$ receptor.[2,3] Pretreatment with cangrelor significantly reduces blood clotting induced by ADP in a mouse model of pulmonary thromboembolism.[4] Formulations containing cangrelor have been used to prevent blood clotting in at-risk patients.[5]

References

1. Ingall, A.H., Dixon, J., Bailey, A., *et al*. Antagonists of the platelet P2T receptor: A novel approach to antithrombotic therapy. *J. Med. Chem.* **42(2)**, 213-220 (1999).
2. Wallentin, L. P2Y12 inhibitors: Differences in properties and mechanisms of action and potential consequences for clinical use. *Eur. Heart J.* **30(16)**, 1964-1977 (2009).
3. Remko, M., Remková, A., and Boer, R. A comparative study of molecular structure, pKa, lipophilicity, solubility, absorption and polar surface area of some antiplatelet drugs. *Int. J. Mol. Sci.* **17(3)**, 388 (2016).
4. Przygodzki, T., Talar, M., Blazejczyk, A., *et al.* Quantification of the blood platelet reactivity in the ADP-induced model of non-lethal pulmonary thromboembolism in mice with the use of laser doppler flowmetry. *PLoS One* **11(1)**, e0146346 (2016).
5. Laine, M., Paganelli, F., and Bonello, L. P2Y12-ADP receptor antagonists: Days of future and past. *World J. Cardiol.* **8(5)**, 327-332 (2016).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM