

# 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:  $C_{17}H_{21}Cl_2F_3N_5O_{12}P_3S_2 \cdot 4Na$

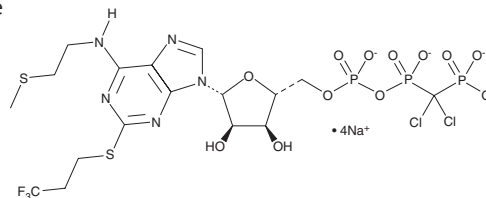
FW: 864.3

Purity:  $\geq 98\%$

Supplied as: A solid

Storage:  $-20^\circ C$

Stability:  $\geq 4$  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).<sup>1</sup> It is a reversible competitive antagonist of the platelet purinergic P2Y<sub>12</sub> receptor.<sup>2,3</sup> Pretreatment with cangrelor significantly reduces blood clotting induced by ADP in a mouse model of pulmonary thromboembolism.<sup>4</sup> Formulations containing cangrelor have been used to prevent blood clotting in at-risk patients.<sup>5</sup>

### 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. P2Y<sub>12</sub> 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. P2Y<sub>12</sub>-ADP receptor antagonists: Days of future and past. *World J. Cardiol.* **8**(5), 327-332 (2016).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/01/2022

#### 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