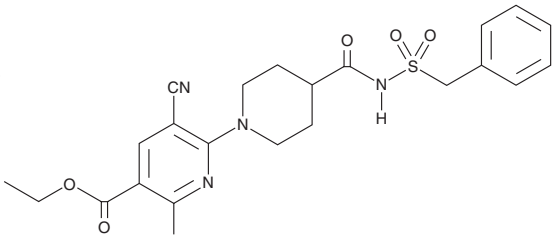
PRODUCT INFORMATION

AZD 1283

Item No. 27649

CAS Registry No.: 919351-41-0
Formal Name: 5-cyano-2-methyl-6-[4-[[[(phenylmethyl)sulfonyl]amino]carbonyl]-1-piperidinyl]-3-pyridinecarboxylic acid, ethyl ester
MF: $C_{23}H_{26}N_4O_5S$
FW: 470.5
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 296 nm
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.

Laboratory Procedures

AZD 1283 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZD 1283 in the solvent of choice, which should be purged with an inert gas. AZD 1283 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of AZD 1283 in these solvents is approximately 15 and 30 mg/ml, respectively.

AZD 1283 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AZD 1283 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AZD 1283 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

AZD 1283 is an antagonist of the purinergic $P2Y_{12}$ receptor (IC_{50} = 25 nM in a GTPγS assay in CHO cells).[1] It selectively binds to the $P2Y_{12}$ receptor (K_d = 11 nM) over more than 100 enzymes, receptors, and ion channels, including the $P2Y_1$, platelet activating factor (PAF), and thromboxane A_2 receptors, at 10 µM.[1,2] AZD 1283 increases blood flow and inhibits platelet aggregation induced by ADP in a modified Folts dog model of thrombosis with ED_{50} values of 3 and 10 µg/kg per minute, respectively.

References

1. Bach, P., Antonsson, T., Bylund, R., *et al.* Lead optimization of ethyl 6-aminonicotinate acyl sulfonamides as antagonists of the P2Y12 receptor. Separation of the antithrombotic effect and bleeding for candidate drug AZD1283. *J. Med. Chem.* **56(17),** 7015-7024 (2013).
2. Giordanetto, F., Bach, P., Zetterberg, F., *et al.* Optimization of ketone-based P2Y(12) receptor antagonists as antithrombotic agents: pharmacodynamics and receptor kinetics considerations. *Bioorg. Med. Chem. Lett.* **24(13),** 2963-2968 (2014).

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