

# PRODUCT INFORMATION

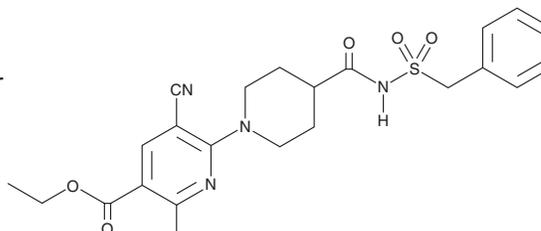


## AZD 1283

Item No. 27649

**CAS Registry No.:** 919351-41-0  
**Formal Name:** 5-cyano-2-methyl-6-[[[(phenylmethyl)sulfonyl]amino]carbonyl]-1-piperidiny]-3-pyridinecarboxylic acid, ethyl ester

**MF:** C<sub>23</sub>H<sub>26</sub>N<sub>4</sub>O<sub>5</sub>S  
**FW:** 470.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 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<sub>12</sub> receptor (IC<sub>50</sub> = 25 nM in a GTPγS assay in CHO cells).<sup>1</sup> It selectively binds to the P2Y<sub>12</sub> receptor (K<sub>d</sub> = 11 nM) over more than 100 enzymes, receptors, and ion channels, including the P2Y<sub>1</sub>, platelet activating factor (PAF), and thromboxane A<sub>2</sub> receptors, at 10 μM.<sup>1,2</sup> AZD 1283 increases blood flow and inhibits platelet aggregation induced by ADP in a modified Folts dog model of thrombosis with ED<sub>50</sub> 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 P2Y<sub>12</sub> 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<sub>12</sub> receptor antagonists as antithrombotic agents: pharmacodynamics and receptor kinetics considerations. *Bioorg. Med. Chem. Lett.* **24**(13), 2963-2968 (2014).

#### 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

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