# **PRODUCT** INFORMATION



## Cediranib

Item No. 11495

CAS Registry No.:	288383-20-0	
Formal Name:	4-[(4-fluoro-2-methyl-1H-indol-	н
	5-yl)oxy]-6-methoxy-7-[3-(1- pyrrolidinyl)propoxy]-quinazoline	
Synonyms:	AZD 2171, ZD 2171	
MF:	C <sub>25</sub> H <sub>27</sub> FN <sub>4</sub> O <sub>3</sub>	Ŭ I
FW:	450.5	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 235, 320 nm	
Supplied as:	A crystalline solid	$\langle \gamma \gamma$
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Cediranib is supplied as a crystalline solid. A stock solution may be made by dissolving the cediranib in the solvent of choice, which should be purged with an inert gas. Cediranib is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of cediranib in ethanol is approximately 3 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Cediranib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cediranib should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Cediranib has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Receptors for VEGF have central roles in vasculogenesis and angiogenesis and thus serve as targets for cancer therapy.<sup>1,2</sup> Cediranib is a potent inhibitor of VEGF receptor tyrosine kinases, including VEGFR1, 2, and 3 (IC<sub>50</sub>s = 5, 1, and 3 nM, respectively).<sup>3</sup> It also potently inhibits a variety of other receptor and nonreceptor tyrosine kinases, including several in the platelet-derived growth factor, fibroblast growth factor, and endothelial growth factor receptor families.<sup>3,4</sup> Cediranib blocks tubule formation by human umbilical vein endothelial cells in vitro and prevents angiogenesis as well as xenograft tumor growth in vivo.<sup>3</sup> Because of these effects, cediranib has potential use in a range of cancers.<sup>5-7</sup>

#### References

- 1. Rini, B.I. Cancer 115, 2306-2312 (2009).
- 2. Burger, R.A. Gynecol. Oncol. 121(1), 230-238 (2011).
- 3. Wedge, S.R., Kendrew, J., Hennequin, L.F., et al. Cancer Res. 65(10), 4389-4400 (2005).
- 4. Davis, M.I., Hunt, J.P., Herrgard, S., et al. Nat. Biotechnol. 29(11), 1046-1051 (2011).
- 5. Bhargava, P. and Robinson, M.O. Curr. Oncol. Rep. 13(2), 103-111 (2011).
- 6. Conti, A., Santoni, M., Amantini, C., et al. Biomed. Res. Int. 2013, 419176 (2013).
- 7. Castelli, C., Tazzari, M., Negri, T., et al. J. Transl. Med. 11(1), 237 (2013).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY 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.

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