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Product Information

Product ID V0352 CAS No. 443913-73-3 **Chemical Name**

Synonym ZD6474, CH331

Formula C₂₂H₂₄BrFN₄O₂

Formula Wt. 475.35

Melting Point

Purity ≥98%

Solubility

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
V0352	5 mg	\$71.70
V0352	25 mg	\$165.40
V0352	100 mg	\$468.60

Store Temp Ambient Ship Temp Ambient

Description Vandetanib is an anticancer chemotherapeutic and anti-angiogenic compound that acts as an ATP-competitive inhibitor of RET, EGFR, and VEGFR2. In a cellular model of medullary thyroid carcinoma, vandetanib inhibits phosphorylation of RET, Shc, and MAPKs, inhibiting cell proliferation. In glioblastoma cells, vandetanib induces autophagy and apoptosis, and in a similar in vivo model, prevents tumor growth. In separate animal models, vandetanib's inhibition of VEGFR2 decreases tumor microvessel density and tumor cell proliferation. Vandetanib also induces hypertension and prolongs the cardiac QT interval in clinical settings.

References Liu Y, Liu Y, Fan ZW, et al. Meta-analysis of the risks of hypertension and QTc prolongation in patients with advanced non-small cell lung cancer who were receiving vandetanib. Eur J Clin Pharmacol. 2015 May;71(5):541-7. PMID: 25753291

> Shen J, Zheng H, Ruan J, et al. Autophagy inhibition induces enhanced proapoptotic effects of ZD6474 in glioblastoma. Br J Cancer. 2013 Jul 9;109(1):164-71. PMID: 23799852.

Samadi AK, Bazzill J, Zhang X, et al. Novel withanolides target medullary thyroid cancer through inhibition of both RET phosphorylation and the mammalian target of rapamycin pathway. Surgery. 2012 Dec;152(6):1238-47. PMID: 23158190.

Vitagliano D. De Falco V. Tamburrino A. et al. The tyrosine kinase inhibitor ZD6474 blocks proliferation of RET mutant medullary thyroid carcinoma cells. Endocr Relat Cancer. 2010 Nov 30;18(1):1-11. PMID: 20943719.

Yano S, Muguruma H, Matsumori Y, et al. Antitumor vascular strategy for controlling experimental metastatic spread of human small-cell lung cancer cells with ZD6474 in natural killer cell-depleted severe combined immunodeficient mice. Clin Cancer Res. 2005 Dec 15;11(24 Pt 1):8789-98. PMID: 16361567.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.