

PRODUCT INFORMATION

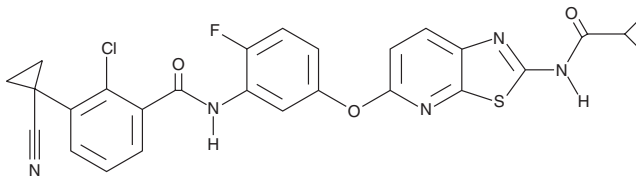


Takeda-6d

Item No. 35754

CAS Registry No.: 1125632-93-0
Formal Name: 2-chloro-3-(1-cyanocyclopropyl)-N-[5-[[2-[(cyclopropylcarbonyl)amino][5,4-b]pyridin-5-yl]oxy]-2-fluorophenyl]-benzamide

MF: C₂₇H₁₉ClFN₅O₃S
FW: 548.0
Purity: ≥95%
Supplied as: A 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

Takeda-6d is supplied as a solid. A stock solution may be made by dissolving the takeda-6d in the solvent of choice, which should be purged with an inert gas. Takeda-6d is soluble in the organic solvent DMSO at a concentration of approximately 20 mM.

Description

Takeda-6d is a dual inhibitor of RAF kinases and VEGFR2.¹ It inhibits wild-type B-RAF, mutant B-RAF^{V600E}, and C-RAF (IC₅₀s = 12, 7, and 1.5 nM, respectively), as well as VEGFR2 (IC₅₀ = 2.8 nM). Takeda-6d is selective for these kinases over a panel of 19 additional kinases (IC₅₀s = >1,000 nM) but does inhibit FGFR3, PDGFR α , and PDGFR β (IC₅₀s = 22, 12, and 5.5 nM, respectively). It inhibits MEK and ERK1/2 phosphorylation in several colon cancer and melanoma cell lines expressing B-RAF^{V600E} when used at concentrations ranging from 100 to 1,600 nM, as well as inhibits VEGF-A-induced phosphorylation of VEGFR2 in VEGFR2-overexpressing KDR cells (IC₅₀ = 0.53 nM). Takeda-6d (10 mg/kg) reduces tumor volume in an A375 melanoma mouse xenograft model.

Reference

- Okaniwa, M., Hirose, M., Imada, T., *et al.* Design and synthesis of novel DFG-out RAF/vascular endothelial growth factor receptor 2 (VEGFR2) inhibitors. 1. Exploration of [5,6]-fused bicyclic scaffolds. *J. Med. Chem.* **55**(7), 3452-3478 (2012).

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.

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