

PRODUCT INFORMATION

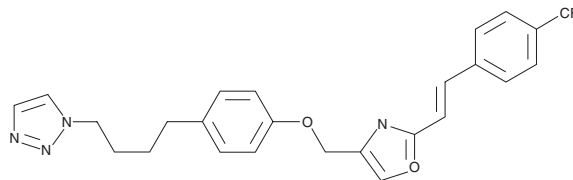


Mubritinib

Item No. 12096

CAS Registry No.: 366017-09-6
Formal Name: 1-[4-[4-[[2-[(1E)-2-[4-(trifluoromethyl)phenyl]ethenyl]-4-oxazolyl]methoxy]phenyl]butyl]-1H-1,2,3-triazole

Synonym: TAK-165
MF: C₂₅H₂₃F₃N₄O₂
FW: 468.5
Purity: ≥98%
UV/Vis.: λ_{max}: 222, 306 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

Mubritinib is supplied as a crystalline solid. A stock solution may be made by dissolving the mubritinib in the solvent of choice. Mubritinib is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of mubritinib in these solvents is approximately 5 mg/ml.

Mubritinib is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Mubritinib is a selective inhibitor of the human epidermal growth factor receptor 2 (HER2), inhibiting HER2 phosphorylation with an IC₅₀ value of 6 nM.¹ It is without effect on EGFR, FGFR, PDGFR, JAK1, Src, and Blk (IC₅₀ > 25 μM).¹ Mubritinib inhibits the proliferation of breast, bladder, kidney, and prostate cancer cells *in vitro* and *in vivo*.^{1,2}

References

1. Nagasawa, J., Mizokami, A., Koshida, K., *et al.* Novel HER2 selective tyrosine kinase inhibitor, TAK-165, inhibits bladder, kidney and androgen-independent prostate cancer *in vitro* and *in vivo*. *Int. J. Urol.* **13**, 587-592 (2006).
2. Sridhar, S.S., Seymour, L., and Shepherd, F.A. Inhibitors of epidermal-growth-factor receptors: A review of clinical research with a focus on non-small-cell lung cancer. *Lancet Oncol.* **4(7)**, 397-406 (2003).

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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