# PRODUCT INFORMATION



## **TAK-285**

Item No. 29157

CAS Registry No.: 871026-44-7

Formal Name: N-[2-[4-[[3-chloro-4-[3-

> (trifluoromethyl)phenoxy] phenyl]amino]-5H-pyrrolo[3,2-d] pyrimidin-5-yl]ethyl]-3-hydroxy-3-

methyl-butanamide

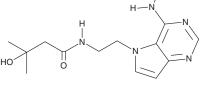
MF: C26H25CIF3N5O3

548.0 FW: **Purity:** ≥95%

 $\lambda_{max}$ : 215, 306 nm UV/Vis.:

A solid Supplied as: -20°C Storage: Stability: ≥4 years

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



## **Laboratory Procedures**

TAK-285 is supplied as a solid. A stock solution may be made by dissolving the TAK-285 in the solvent of choice, which should be purged with an inert gas. TAK-285 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of TAK-285 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

TAK-285 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TAK-285 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. TAK-285 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

TAK-285 is a dual inhibitor of EGFR and HER2 ( $IC_{50}$ s = 23 and 17 nM, respectively).<sup>1</sup> It is selective for EGFR and HER2 over a panel of 36 kinases ( $IC_{50}s = 250$ ->10,000 nM). TAK-285 inhibits the proliferation of BT474 breast cancer cells ( $GI_{50} = 17$  nM) as well as induces tumor regression in a 4-1st gastric adenocarcinoma rat xenograft model when administered at doses of 25 and 50 mg/kg.

#### Reference

1. Ishikawa, T., Seto, M., Banno, H., et al. Design and synthesis of novel human epidermal growth factor receptor 2 (HER2)/epidermal growth factor receptor (EGFR) dual inhibitors bearing a pyrrolo[3,2-d] pyrimidine scaffold. J. Med. Chem. 54(23), 8030-8050 (2011).

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

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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