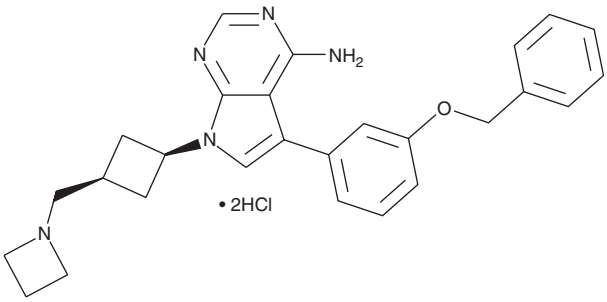
PRODUCT INFORMATION

NVP-AEW541 (hydrochloride)

Item No. 13641

CAS Registry No.: 2320261-63-8
Formal Name: 7-[*cis*-3-(1-azetidinylmethyl) cyclobutyl]-5-[3-(phenylmethoxy) phenyl]-7H-pyrrolo[2,3-d] pyrimidin-4-amine, dihydrochloride
MF: $C_{27}H_{29}N_5O \bullet 2HCl$
FW: 512.5
Purity: ≥98%
UV/Vis.: λ_{max}: 288 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

NVP-AEW541 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the NVP-AEW541 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. NVP-AEW541 (hydrochloride) is soluble in the organic solvent ethanol at a concentration of approximately 0.3 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of NVP-AEW541 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of NVP-AEW541 (hydrochloride) in PBS (pH 7.2) is approximately 2.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

NVP-AEW541 is an inhibitor of insulin-like growth factor 1 receptor (IGF-1R; IC_{50} = 0.15 µM in a cell-free assay).[1] It is selective for IGF-1R over a panel of 20 kinases but also inhibits the insulin receptor (InsR), VEGFR1, FMS-related tyrosine kinase 3 (FLT3), and tunica interna endothelial cell kinase 2 (Tie2; IC_{50}s = 0.14, 0.6, 0.42, and 0.53 µM, respectively, in cell-free assays). NVP-AEW541 selectively inhibits the autophosphorylation of IGF-1R over InsR, EGFR, PDGFR, c-Kit, and Bcr-Abl in cells (IC_{50}s = 0.086, 2.3, >10, >10, >5, and >10 µM, respectively). It reduces tumor volume in an NWT-21 murine fibrosarcoma model when administered at doses of 20, 30, or 50 mg/kg twice per day.

Reference

1. García-Echeverría, C., Pearson, M.A., Marti, A., *et al.* In vivo antitumor activity of NVP-AEW541—a novel, potent, and selective inhibitor of the IGF-IR kinase. *Cancer Cell* **5(3)**, 231-239 (2004).

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.

WARRANTY AND LIMITATION OF REMEDY
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