Vandetanib
Item No. 14706

CAS Registry No.: 443913-73-3
Formal Name: N-[(4-bromo-2-fluorophenyl)-6-methoxy-7-[(1-methyl-4-piperidinyl) methoxy]-4-quinazolinamine
Synonyms: Caprelsa®, CH 331, Zactima,
MF: C34H21BrFN5O2
FW: 647.40
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax: 217, 250, 331 nm

Laboratory Procedures
For long term storage, we suggest that vandetanib be stored as supplied at -20°C. It should be stable for at least two years.

Vandetanib is supplied as a crystalline solid. A stock solution may be made by dissolving the vandetanib in the solvent of choice. Vandetanib is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of vandetanib in these solvents is approximately 2 mg/ml.

Vandetanib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, vandetanib should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Vandetanib has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Vandetanib is a broad spectrum, orally available kinase inhibitor that targets primarily tyrosine kinases, including vascular endothelial growth factor receptor (VEGFR) and epidermal growth factor receptor (EGFR), with IC50 values in several serine/threonine kinases. Primarily because of its effects on receptor tyrosine kinases like VEGFR and EGFR, vandetanib inhibits angiogenesis, cell growth, and metastasis and is effective against certain forms of cancer.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/14706