PRODUCT INFORMATION

Saracatinib
Item No. 11497

CAS Registry No.: 379231-04-6
Formal Name: N-(5-chloro-1,3-benzodioxol-4-y1)-7-[2-(4-methyl-1-piperazinyl)ethoxy]-5-[(tetrahydro-2H-pyran-4-yl)oxy]-4-quinazolinamine
Synonym: AZD 0530
MF: C_{27}H_{32}ClN_{5}O_{5}
FW: 542.0
Purity: ≥90%
Supplied as: A crystalline solid
UV/Vis.: \( \lambda_{\text{max}} \): 236, 259 nm
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Saracatinib is supplied as a crystalline solid. A stock solution may be made by dissolving the saracatinib in the solvent of choice. Saracatinib is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of saracatinib in ethanol is approximately 0.1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

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

Description

Saracatinib is a dual inhibitor of the tyrosine kinases c-Src and Abl (IC_{50} = 2.7 and 30 nM, respectively). It less effectively inhibits other receptor and non-receptor tyrosine kinases as well as assorted serine/threonine kinases. Saracatinib is orally available and blocks cell motility, migration, adhesion, invasion, proliferation, differentiation, and survival. Through its effects on c-Src, it reduces osteoclast bone resorption. Saracatinib also blocks dengue virus RNA replication through its effect on Fyn kinase.

References