

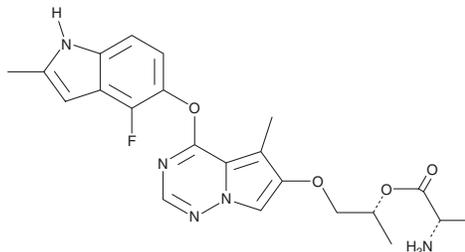
PRODUCT INFORMATION



Brivanib Alaninate

Item No. 26081

CAS Registry No.: 649735-63-7
Formal Name: L-alanine, (1R)-2-[[4-[(4-fluoro-2-methyl-1H-indol-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-1-methylethyl ester
Synonym: BMS 582664
MF: C₂₂H₂₄FN₅O₄
FW: 441.5
Purity: ≥98%
UV/Vis.: λ_{max}: 221, 240 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

Brivanib alaninate is supplied as a crystalline solid. A stock solution may be made by dissolving the brivanib alaninate in the solvent of choice. Brivanib alaninate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of brivanib alaninate in these solvents is approximately 12.5, 20, and 17 mg/ml, respectively.

Description

Brivanib alaninate is the L-alanine prodrug form of brivanib (Item No. 23690), a VEGF receptor 2 (VEGFR2) and FGF receptor 1 (FGFR1) inhibitor.^{1,2} Brivanib alaninate (3 mg/kg per day) reduces hepatic angiogenesis and VEGF, TGF-β1, CD31, and phosphorylated VEGFR2 and FGFR levels in a bile duct-ligated rat model of cirrhosis.³ It reduces tumor growth in an L2987 non-small cell lung cancer mouse xenograft model, exhibiting 97% tumor growth inhibition when administered at a dose of 107 mg/kg.²

References

1. Bhide, R.S., Cai, Z.W., Zhang, Y.Z., *et al.* Discovery and preclinical studies of (R)-1-(4-(4-fluoro-2-methyl-1H-indol-5-yloxy)-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yloxy)propan-2-ol (BMS-540215), an in vivo active potent VEGFR-2 inhibitor. *J. Med. Chem.* **49(7)**, 2143-2146 (2006).
2. Cai, Z.W., Zhang, Y., Borzilleri, R.M., *et al.* Discovery of brivanib alaninate ((S)-((R)-1-(4-(4-fluoro-2-methyl-1H-indol-5-yloxy)-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yloxy)propan-2-yl)2-aminopropanoate), a novel prodrug of dual vascular endothelial growth factor receptor-2 and fibroblast growth factor receptor-1 kinase inhibitor (BMS-540215). *J. Med. Chem.* **51(6)**, 1976-1980 (2008).
3. Lin, H.C., Huang, Y.T., Yang, Y.Y., *et al.* Beneficial effects of dual vascular endothelial growth factor receptor/fibroblast growth factor receptor inhibitor brivanib alaninate in cirrhotic portal hypertensive rats. *J. Gastroenterol. Hepatol.* **29(5)**, 1073-1082 (2014).

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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