PRODUCT INFORMATION



BGJ398 (phosphate)

Item No. 39292

CAS Registry No.: 1310746-10-1

Formal Name: N'-(2,6-dichloro-3,5-dimethoxyphenyl)-

N-[6-[[4-(4-ethyl-1-piperazinyl)phenyl] amino]-4-pyrimidinyl]-N-methyl-urea,

monophosphate

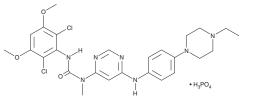
Synonyms: Infigratinib (phosphate),

NVP-BGJ398 (phosphate)

 $C_{26}H_{31}CI_2N_7O_3 \bullet H_3PO_4$ MF:

FW: 658.5 **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

BGJ398 (phosphate) is supplied as a solid. A stock solution may be made by dissolving the BGJ398 (phosphate) in the solvent of choice, which should be purged with an inert gas. BGJ398 (phosphate) is slightly soluble in acetonitrile and DMSO.

BGJ398 (phosphate) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

BGJ398 is an orally available inhibitor of human FGFRs (IC_{50} s = 0.9, 1.4, and 1 nM for FGFR1, FGFR2, and FGFR3, respectively).^{1,2} It inhibits FGFR4 and VEGFR2 with IC₅₀ values of 60 and 180 nM, respectively, and displays comparatively little activity towards Abl, Fyn, Kit, Lck, Lyn, and Yes (IC₅₀s = 0.3-2.5 μM).¹ BGJ398 has been shown to suppress the proliferation of cancer cells with wild-type FGFR3 overexpression (IC₅₀s = 5, 30, 32, and 15 nM, for RT112, RT4, SW780, and JMSU1 cells, respectively). In an RT112 bladder cancer xenograft mouse model overexpressing wild-type FGFR3, BGJ398 inhibited tumor growth after oral administration of 10-30 mg/kg.¹

References

- 1. Guagnano, V., Furet, P., Spanka, C., et al. Discovery of 3-(2,6-dichloro-3,5-dimethoxy-phenyl)-1-{6-[4-(4ethyl-piperazin-1-yl)-phenylamino]-pyrimidin-4-yl}-1-methyl-urea (NVP-BGJ398), a potent and selective inhibitor of the fibroblast growth factor receptor family of receptor tyrosine kinase. J. Med. Chem. 54(20), 7066-7083 (2011).
- 2. Hagel, M., Miduturu, C., Sheets, M., et al. First selective small molecule inhibitor of FGFR4 for the treatment of hepatocellular carcinomas with an activated FGFR4 signaling pathway. Cancer Discov. 5(4), 424-437 (2015).

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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