PRODUCT INFORMATION



PH-797804

Item No. 20244

CAS Registry No.: 586379-66-0

Formal Name: 3-[3-bromo-4-[(2,4-difluorophenyl)

> methoxy]-6-methyl-2-oxo-1(2H)pyridinyl]-N,4-dimethyl-benzamide

MF: $C_{22}H_{19}BrF_2N_2O_3$

477.3 FW: ≥98% **Purity:**

 λ_{max} : 219, 309 nm UV/Vis.: 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

PH-797804 is supplied as a crystalline solid. A stock solution may be made by dissolving the PH-797804 in the solvent of choice, which should be purged with an inert gas. PH-797804 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PH-797804 in these solvents is approximately 2.5, 14, and 12.5 mg/ml, respectively.

PH-797804 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PH-797804 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PH-797804 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PH-797804 is an inhibitor of p38 α MAPK with an IC $_{50}$ value of 26 nM in a cell-free assay. 1,2 It is 4-fold more selective for p38 α compared to p38 β and does not inhibit JNK2 or ERK at concentrations up to 1 μ M. PH-797804 treatment for 10 days in vivo demonstrates anti-inflammatory activity in chronic inflammatory disease models, significantly reducing both joint inflammation and associated bone loss in streptococcal cell wall-induced arthritis in rats and collagen-induced arthritis in mice. 1

References

- 1. Hope, H. R., Anderson, G. D., Burnette, B. L., et al. Anti-inflammatory properties of a novel N-phenyl pyridinone inhibitor of p38 mitogen-activated protein kinase: Preclinical-to-clinical translation. J. Pharmacol. Exp. Ther. 331(3), 882-895 (2009).
- 2. Goldstein, D. M., Kuglstatter, A., Lou, Y., et al. Selective p38α inhibitors clinically evaluated for the treatment of chronic inflammatory disorders. J. Med. Chem. 53, 2345-2353 (2010).

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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