PRODUCT INFORMATION



BIA 10-2474

Item No. 23157

CAS Registry No.: 1233855-46-3

Formal Name: N-cyclohexyl-N-methyl-4-(1-oxido-3-

pyridinyl)-1H-imidazole-1-carboxamide

MF: $C_{16}H_{20}N_4O_2$

FW: 300.4 **Purity:** ≥98%

 λ_{max} : 213, 263 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

BIA 10-2474 is supplied as a crystalline solid. A stock solution may be made by dissolving the BIA 10-2474 in the solvent of choice, which should be purged with an inert gas. BIA 10-2474 is sparingly soluble in ethanol and dimethyl formamide. BIA 10-2474 is also sparingly soluble in DMSO (warmed and sonicated), at a concentration of approximately 6.4 mg/ml.

Description

BIA 10-2474 is an inhibitor of fatty acid amide hydrolase (FAAH; IC_{50} = 4.9 nM in HEK293T cells expressing the human recombinant enzyme). It also inhibits FAAH2, a/β-hydrolase domain-containing protein 6 (ABHD6), carboxylesterase 2 (CES2), and patatin-like phospholipase domain 6 (PNPLA6) with IC₅₀ values of 0.4, 0.081, 2, and 11 μM, respectively. BIA 10-2474 alters expression of 161 lipid species, including FAAH substrates as well as other lipid classes, in human cortical neuron cultures indicating compound promiscuity. Formulations containing BIA 10-2474 were previously investigated clinically for the management of chronic pain but use was halted due to development of significant neurotoxicity.

Reference

1. van Esbroeck, A.C.M., Janssen, A.P.A., Cognetta, A.B., III., et al. Activity-based protein profiling reveals off-target proteins of the FAAH inhibitor BIA 10-2474. Science 356(6342), 1084-1087 (2017).

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.

WARRANTY AND LIMITATION OF REMEDY

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