Product Information



PF-622

Item No. 10010907

CAS Registry No.: 898235-65-9

Formal Name: N-phenyl-4-(2-quinolinylmethyl)-1-

piperazinecarboxamide

MF: $C_{21}H_{22}N_4O$ FW: **Purity:** >98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid λ_{max} : 232 nm UV/Vis.:

Laboratory Procedures

For long term storage, we suggest that PF-622 be stored as supplied at -20°C. It should be stable for at least two years. PF-622 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-622 in an organic solvent purged with an inert gas. PF-622 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PF-622 in these solvents are approximately 0.3, 2, and 3 mg/ml, respectively.

PF-622 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-622 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PF-622 has a solubility of approximately 0.15 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.

Fatty acid amide hydrolase (FAAH) is the enzyme responsible for hydrolysis and inactivation of fatty acid amides including anandamide and oleamide. PF-622 is a potent, time-dependent, irreversible FAAH inhibitor with IC₅₀ values of 0.99 and 0.033 µM when preincubated with human recombinant FAAH for 5 and 60 minutes, respectively. Activitybased profiling of various human and murine tissue proteome samples revealed that PF-622 is highly selective for FAAH relative to other serine hydrolases, showing no discernable off-site activity up to 500 μM.¹

Reference

1. Ahn, K., Johnson, D.S., Fitzgerald, L.R., et al. Novel mechanistic class of fatty acid amide hydrolase inhibitors with remarkable selectivity. Biochemistry 46, 13019-13030 (2007).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10010907

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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