

# 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: 346.4

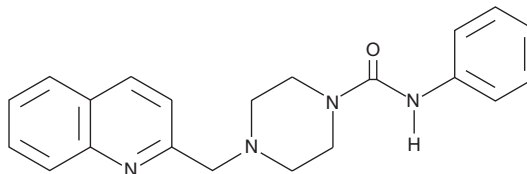
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 232 nm

Supplied as: A crystalline solid

Storage:  $-20^{\circ}C$

Stability:  $\geq 2$  years



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

### Laboratory Procedures

PF-622 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-622 in the solvent of choice, 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.

### Description

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  $IC_{50}$  values of 0.99 and 0.033  $\mu M$  when preincubated with human recombinant FAAH for 5 and 60 minutes, respectively.<sup>1</sup> Activity-based 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  $\mu M$ .<sup>1</sup>

### References

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).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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