# PRODUCT INFORMATION



PF-4989216

Item No. 19308

CAS Registry No.: 1276553-09-3

Formal Name: 4-(4-cyano-2-fluorophenyl)-2-(4-morpholinyl)-5-

(1H-1,2,4-triazol-5-yl)-3-thiophenecarbonitrile

MF:  $C_{18}H_{13}FN_6OS$ 

FW: 380.4 **Purity:** ≥98%

 $\lambda_{max}$ : 229, 309 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

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

### **Laboratory Procedures**

PF-4989216 is supplied as a crystalline solid. A stock solution may be made by dissolving the PF-4989216 in the solvent of choice, which should be purged with an inert gas. PF-4989216 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PF-4989216 in ethanol is approximately 1 mg/ml and approximately 25 mg/ml in DMSO and DMF.

PF-4989216 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PF-4989216 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PF-4989216 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

PF-4989216 is an orally bioavailable broad-spectrum PI3K inhibitor ( $IC_{50}s = 2, 142, 65, 1, and 110 nM$ for p110α, p110β, p110γ, p110δ, and VPS34, respectively). It inhibits the cell viability of small-cell lung cancer (SCLC) cells with a mutation in PIK3CA, blocking PI3K downstream signaling and inducing apoptosis. 1 PF-4989216 prevents tumor growth of SCLC cells harboring PIK3CA mutation in mice.<sup>1</sup>

### Reference

1. Walls, M., Baxi, S.M., Mehta, P.P., et al. Targeting small cell lung cancer harboring PIK3CA mutation with a selective oral PI3K inhibitor PF-4989216. Clin. Cancer Res. 20(3), 631-643 (2014).

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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