

# PRODUCT INFORMATION

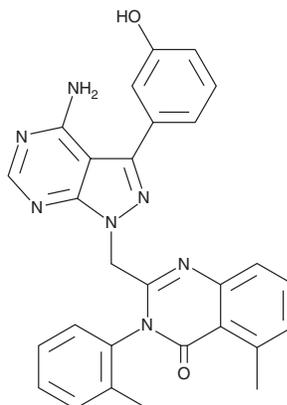


## PIK-294

Item No. 23427

**CAS Registry No.:** 900185-02-6  
**Formal Name:** 2-[[4-amino-3-(3-hydroxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl]methyl]-5-methyl-3-(2-methylphenyl)-4(3H)-quinazolinone

**MF:** C<sub>28</sub>H<sub>23</sub>N<sub>7</sub>O<sub>2</sub>  
**FW:** 489.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 205, 271 nm  
**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

PIK-294 is supplied as a crystalline solid. A stock solution may be made by dissolving the PIK-294 in the solvent of choice, which should be purged with an inert gas. PIK-294 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PIK-294 is approximately 0.25 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

PIK-294 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PIK-294 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PIK-294 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

PIK-294 is a potent inhibitor of the phosphatidylinositol 3-kinase (PI3K) catalytic subunit p110δ (IC<sub>50</sub>s = 10,000, 490, 10, and 160 nM, for p110 subunit isoforms α, β, δ, and γ, respectively).<sup>1</sup> It is selective for PI3K p110 subunit isoforms over DNA-PK, mTOR, and eight tyrosine kinases tested.<sup>2</sup> It inhibits chemokinetic and chemotactic migration of neutrophils induced by CXCL8 in a three-dimensional collagen gel migration assay.<sup>3</sup>

### References

1. Knight, Z.A., Gonzalez, B., Feldman, M.E., *et al.* A pharmacological map of the PI3-K family defines a role for p110α in insulin signaling. *Cell* **125(4)**, 733-747 (2006).
2. Apsel, B., Blair, J.A., Gonzalez, B., *et al.* Targeted polypharmacology: Discovery of dual inhibitors of tyrosine and phosphoinositide kinases. *Nat. Chem. Biol.* **4(11)**, 691-699 (2008).
3. Martin, K.J.S., Muessel, M.J., Pullar, C.E., *et al.* The role of phosphoinositide 3-kinases in neutrophil migration in 3D collagen gels. *PLoS One* **10(2)**, e0116250 (2015).

#### 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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