

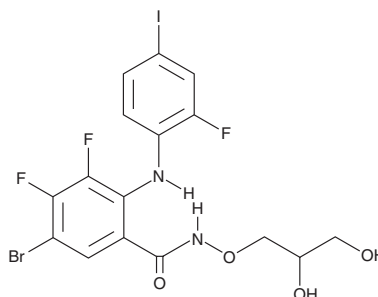
# PRODUCT INFORMATION



**PD 318088**

Item No. 30265

**CAS Registry No.:** 391210-00-7  
**Formal Name:** 5-bromo-N-(2,3-dihydroxypropoxy)-3,4-difluoro-2-[(2-fluoro-4-iodophenyl)amino]-benzamide  
**MF:**  $C_{16}H_{13}BrF_3IN_2O_4$   
**FW:** 561.1  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 239, 284 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



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

## Laboratory Procedures

PD 318088 is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 318088 in the solvent of choice, which should be purged with an inert gas. PD 318088 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PD 318088 in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

PD 318088 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PD 318088 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PD 318088 has a solubility of approximately 0.20 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

PD 318088 is an allosteric inhibitor of MEK1 and an analog of the MEK inhibitor PD 184352 (CI-1040; Item No. 11580).<sup>1,2</sup> PD318088 binds to MEK1 concurrently with Mg-ATP and stabilizes an inactive conformation of MEK1, as well as prevents formation of tetramers and higher-order oligomers.

## References

- Ohren, J.F., Chen, H., Pavlovsky, A., *et al.* Structures of human MAP kinase kinase 1 (MEK1) and MEK2 describe novel noncompetitive kinase inhibition. *Nat. Struct. Mol. Biol.* **11**(12), 1192-1197 (2004).
- Shang, J., Lu, S., Jiang, Y., *et al.* Allosteric modulators of MEK1: Drug design and discovery. *Chem. Biol. Drug Des.* **88**(4), 485-497 (2016).

### 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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