

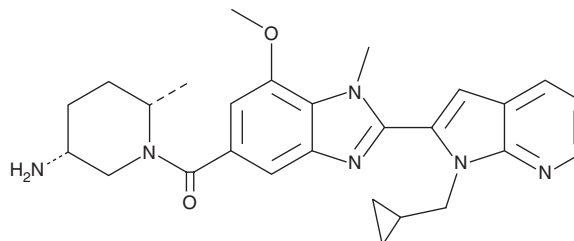
# PRODUCT INFORMATION



## BMS-P5

Item No. 33581

**CAS Registry No.:** 1550371-22-6  
**Formal Name:** [(2S,5R)-5-amino-2-methyl-1-piperidinyl] [2-[1-(cyclopropylmethyl)-1H-pyrrolo[2,3-b]pyridin-2-yl]-7-methoxy-1-methyl-1H-methanone  
**MF:** C<sub>27</sub>H<sub>32</sub>N<sub>6</sub>O<sub>2</sub>  
**FW:** 472.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 219, 308 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

BMS-P5 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS-P5 in the solvent of choice, which should be purged with an inert gas. BMS-P5 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BMS-P5 in these solvents is approximately 30, 5, and 20 mg/ml, respectively.

BMS-P5 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS-P5 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. BMS-P5 has a solubility of approximately 0.11 mg/ml in a 1:8 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

BMS-P5 is an inhibitor of protein arginine deiminase 4 (PAD4; IC<sub>50</sub> = 0.098 μM).<sup>1</sup> It is selective for PAD4 over PAD1, -2, and -3 (IC<sub>50</sub>s = >10 μM for all). BMS-P5 (1 μM) inhibits citrullination of histone H3 and neutrophil extracellular trap (NET) formation induced by RPMI-8226- or MM.1S-conditioned medium in isolated human neutrophils. It delays disease onset and increases survival in a DP42 syngeneic mouse model of multiple myeloma when administered at a dose of 50 mg/kg.

### Reference

1. Li, M., Lin, C., Deng, H., *et al.* A novel peptidylarginine deiminase 4 (PAD4) inhibitor BMS-P5 blocks formation of neutrophil extracellular traps and delays progression of multiple myeloma. *Mol. Cancer Ther.* **19**(7), 1530-1538 (2020).

#### 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.

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