

# PRODUCT INFORMATION



## BMS 1166

Item No. 31441

**CAS Registry No.:** 1818314-88-3  
**Formal Name:** (4R)-1-[[5-chloro-2-[(3-cyanophenyl)methoxy]-4-[[3-(2,3-dihydro-1,4-benzodioxin-6-yl)-2-methylphenyl]methoxy]phenyl]methyl]-4-hydroxy-D-proline

**MF:** C<sub>36</sub>H<sub>33</sub>ClN<sub>2</sub>O<sub>7</sub>

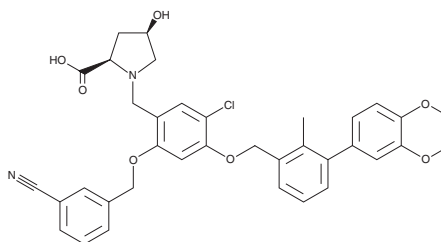
**FW:** 641.1

**Purity:** ≥98%

**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 1166 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS 1166 in the solvent of choice, which should be purged with an inert gas. BMS 1166 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of BMS 1166 in these solvents is approximately 30 mg/ml.

BMS 1166 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS 1166 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BMS 1166 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

BMS 1166 is an inhibitor of the protein-protein interaction between programmed cell death 1 (PD-1) and its ligand PD-L1 that has an IC<sub>50</sub> value of 1.4 nM in a homologous time-resolved fluorescence (HTRF) assay.<sup>1</sup> It increases the activation of Jurkat cells expressing PD-1 in co-culture with CHO cells expressing PD-L1 (EC<sub>50</sub> = 276 nM in a reporter assay).<sup>2</sup>

## References

1. Guzik, K., Zak, K.M., Grudnik, P., *et al.* Small-molecule inhibitors of the programmed cell death-1/programmed death-ligand 1 (PD-1/PD-L1) interaction via transiently induced protein states and dimerization of PD-L1. *J. Med. Chem.* **60**(13), 5857-5867 (2017).
2. Skalniak, L., Zak, K.M., Guzik, K., *et al.* Small-molecule inhibitors of PD-1/PD-L1 immune checkpoint alleviate the PD-L1-induced exhaustion of T-cells. *Oncotarget* **8**(42), 72167-72181 (2017).

### 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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