

PRODUCT INFORMATION



BMS-1001

Item No. 45922

CAS Registry No.: 2113650-03-4
Formal Name: N-[[2-[(3-cyanophenyl) methoxy]-4-[[3-(2,3-dihydro-1,4-benzodioxin-6-yl)-2-methylphenyl] methoxy]-5-methylphenyl] methyl]-D-serine

MF: C₃₅H₃₄N₂O₇

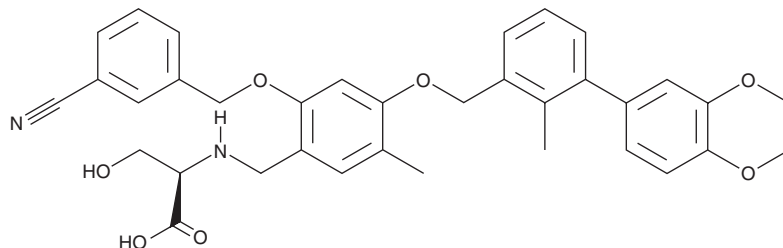
FW: 594.7

Purity: ≥95%

Supplied as: A 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-1001 is supplied as a solid. A stock solution may be made by dissolving the BMS-1001 in the solvent of choice, which should be purged with an inert gas. BMS-1001 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

BMS-1001 is an inhibitor of the protein-protein interaction between programmed cell death protein 1 (PD-1) and PD-1 ligand (PD-L1; IC₅₀ = 2.25 nM in a cell-free assay).¹ It has been used in the synthesis of a proteolysis-targeting chimera (PROTAC) that drives PD-L1 degradation in MC-38 colon cancer cells.² Conjugates containing BMS-1001 have been used as PET radiotracers for imaging PDL-1 expression in an A549-hPDL1 lung cancer mouse xenograft model.³

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. Qi, Q., Zhang, Z., Ji, X., *et al.* Rational design of PROTAC degraders and their spatiotemporal controlled delivery for enhanced tumor penetration and PD-L1 protein degradation. *J. Med. Chem.* **68**(21), 22665-22688 (2025).
3. Huang, Y., Li, C., Li, Z., *et al.* Development and preclinical evaluation of [⁶⁸Ga]BMSH as a new potent positron emission tomography tracer for imaging programmed death-ligand 1 expression. *Pharmaceuticals (Basel)* **16**(10), 1487 (2023).

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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