PRODUCT INFORMATION



Ro 90-7501 Item No. 18881

CAS Registry No.: 293762-45-5

Formal Name: 2'-(4-aminophenyl)-[2,5'-bi-1H-

benzimidazol]-5-amine

MF: $C_{20}H_{16}N_{6}$ FW: 340.4 **Purity:** ≥98%

 λ_{max} : 226, 276, 354 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Ro 90-7501 is supplied as a crystalline solid. A stock solution may be made by dissolving the Ro 90-7501 in the solvent of choice, which should be purged with an inert gas. Ro 90-7501 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Ro 90-7501 in these solvents is approximately 2, 10, and 15 mg/ml, respectively.

Ro 90-7501 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Ro 90-7501 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ro 90-7501 has a solubility of approximately 0.1 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ro 90-7501 is a bi-benzimidazole compound that was first found to retard the formation of mature amyloid β42 fibrils in a cell-based assay. Instead, extended polymeric sheets and fibrillary intermediates of amyloid β42 accumulated in response to Ro 90-7501 treatment, resulting in reduced cytotoxicity $(EC_{50} = 2 \mu M)$. More recently, Ro 90-7501 was shown to modulate signaling in cells stimulated with polyinosinic-polycytidylic acid (poly(I:C), a toll-like receptor 3 (TLR3), and RIG-1-like receptor agonist.² Ro 90-7501 (10 μM) enhanced poly(I:C)-induced IFN-β expression, decreased NF-κB activation, and amplified the suppression of vesicular stomatitis virus replication by poly(I:C) in HEK293 cells expressing TLR3.2

References

- 1. Bohrmann, B., Adrian, M., Dubochet, J., et al. Self-assembly of beta-amyloid 42 is retarded by small molecular ligands at the stage of structural intermediates. J. Struct. Biol. 130(2-3), 232-246 (2000).
- Guo, F., Mead, J., Aliya, N., et al. RO 90-7501 enhances TLR3 and RLR agonist induced antiviral response. PLoS One 7(10), (2012).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 11/28/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM