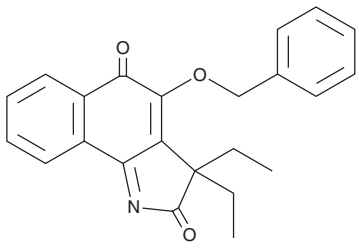
PRODUCT INFORMATION

RIG012

Item No. 46473

CAS Registry No.:	2642218-43-5
Formal Name:	3,3-diethyl-4-(phenylmethoxy)-2H-benz[g]indole-2,5(3H)-dione
MF:	$C_{23}H_{21}NO_3$
FW:	359.4
Purity:	≥98%
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

RIG012 is supplied as a solid. A stock solution may be made by dissolving the RIG012 in the solvent of choice, which should be purged with an inert gas. RIG012 is soluble (≥10 mg/ml) in DMSO. RIG012 is sparingly soluble (1-10 mg/ml) in ethanol.

Description

RIG012 is an inhibitor of retinoic acid-inducible gene 1 (RIG-I; IC_{50} = 0.71 µM for the ATPase activity).[1] It completely inhibits RIG-I-agonist-induced increases in IFN-β and radical S-adenosylmethionine domain-containing protein 2 (RSAD2) levels in A549 cells at 9 µM and reduces alendronate- and lipid A-induced IFN-β production in J774.1 macrophages at 5 µM.[1,2] RIG012 (5 mg/kg) decreases lung injury scores and increases survival in a mouse model of pneumonia induced by *K. pneumoniae*.[3]

References

1. Rawling, D.C., Jagdmann, G.E., Jr., Potapova, O., *et al.* Small-molecule antagonists of the RIG-I innate immune receptor. *ACS Chem. Biol.* **15(2)**, 311-317 (2020).
2. Watanabe, S., Kiyoura, Y., and Tamai, R. Pretreatment with alendronate augments lipid A-induced IFN-β production via upregulation of cGAS expression. *Pharmacol. Rep.* **77(5)**, 1389-1399 (2025).
3. Zhang, S., Chen, H., Xie, J., *et al.* RIG012 assists in the treatment of pneumonia by inhibiting the RIG-I-like receptor signaling pathway. *Front. Med. (Lausanne)* **11:1501761**, (2024).

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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