

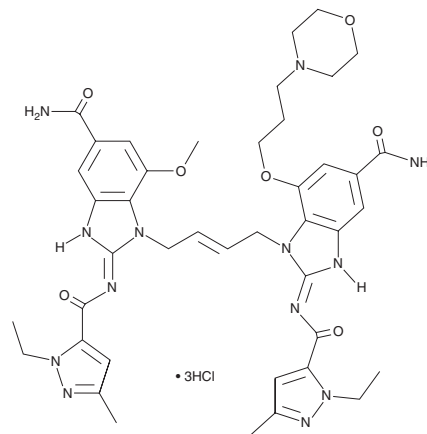
PRODUCT INFORMATION



diABZI STING Agonist-1 (hydrochloride)

Item No. 28054

CAS Registry No.: 2138299-34-8
Formal Name: 1-[(2E)-4-[5-(aminocarbonyl)-2-[[[(1-ethyl-3-methyl-1H-pyrazol-5-yl)carbonyl]amino]-7-methoxy-1H-benzimidazol-1-yl]-2-buten-1-yl]-2-[[[(1-ethyl-3-methyl-1H-pyrazol-5-yl)carbonyl]amino]-7-[3-(4-morpholinyl)propoxy]-1H-benzimidazole-5-carboxamide, trihydrochloride
Synonyms: diABZI Stimulator of Interferon Genes Agonist 1, Diamidobenzimidazole Stimulator of Interferon Genes Agonist 1, Diamidobenzimidazole STING Agonist 1, Stimulator of Interferon Genes Agonist (Compound 3), STING Agonist (Compound 3)
MF: C₄₂H₅₁N₁₃O₇ • 3HCl
FW: 959.3
Purity: ≥98%
UV/Vis.: λ_{max}: 267, 322 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

diABZI STING agonist-1 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the diABZI STING agonist-1 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. diABZI STING agonist-1 (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 50 mg/ml.

Description

diABZI STING agonist-1 is an activator of the stimulator of interferon genes (STING) pathway.¹ It induces secretion of IFN-β in human peripheral blood mononuclear cells (PBMCs; EC₅₀ = 130 nM). diABZI STING agonist-1 (2.5 mg/kg) increases serum levels of Ifn-β, Il-6, Tnf, and chemokine (C-X-C motif) ligand 1 (Cxcl1) in wild-type, but not *Sting*^{-/-}, mice. It inhibits the cytopathic effect of the common cold human coronavirus 229E (HCoV-229E) in infected MRC-5 cells (EC₅₀ = 3 nM). diABZI STING agonist-1 also decreases the level of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA in primary human bronchial airway epithelial cells in an air-liquid interface assay.² It decreases tumor volume and increases survival in a CT26 murine colorectal cancer model when administered at a dose of 3 mg/kg. This compound is expected to exist in one or both tautomeric forms.³

References

1. Ramanjulu, J.M., Pesiridis, G.S., Yang, J., *et al.* Design of amidobenzimidazole STING receptor agonists with systemic activity. *Nature* **564(7736)**, 439-443 (2018).
2. Zhu, Q., Zhang, Y., Wang, L., *et al.* Inhibition of coronavirus infection by a synthetic STING agonist in primary human airway system. *Antiviral Res.* **187**, 105015 (2021).
3. Song, Z., Wang, X., Zhang, Y., *et al.* Structure-activity relationship study of amidobenzimidazole analogues leading to potent and systemically administrable stimulator of interferon gene (STING) agonists. *J. Med. Chem.* **64(3)**, 1649-1669 (2021).

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.

WARRANTY AND LIMITATION OF REMEDY

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