# **PRODUCT** INFORMATION



## diABZI STING Agonist-1

Item No. 42079

CAS Registry No.:	2138498-18-5		
Formal Name:	(2E)-1-[(2E)-4-[(2E)-5-(aminocarbonyl)-2-[[(1-ethyl-3-methyl-	-	
Synonyms:	1H-pyrazol-5-yl)carbonyl]imino]-2,3-dihydro-7-methoxy- 1H-benzimidazol-1-yl]-2-buten-1-yl]-2-[[(1-ethyl-3-methyl- 1H-pyrazol-5-yl)carbonyl]imino]-2,3-dihydro-7-[3-(4- morpholinyl)propoxy]-1H-benzimidazole-5-carboxamide 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)		H <sup>N</sup> 0
MF:	C <sub>42</sub> H <sub>51</sub> N <sub>13</sub> O <sub>7</sub>	N=H	ſ
FW:	849.9	5-4	$\wedge \wedge$
Purity:	≥98%		$\langle N^{r} \rangle$
Supplied as:	A solid	N	) <u> </u>
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 is supplied as a solid. A stock solution may be made by dissolving the diABZI STING agonist-1 in the solvent of choice, which should be purged with an inert gas. diABZI STING agonist-1 is slightly soluble (0.1-1 mg/ml) in acetonitrile and sparingly soluble (1-10 mg/ml) in DMSO.

diABZI STING agonist-1 is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

#### Description

diABZI STING agonist-1 is an activator of the stimulator of interferon genes (STING) pathway.<sup>1</sup> It induces secretion of IFN- $\beta$  in human peripheral blood mononuclear cells (PBMCs; EC<sub>50</sub> = 130 nM). diABZI STING agonist-1 (2.5 mg/kg) increases serum levels of Ifn-β, II-6, Tnf, and chemokine ( $\tilde{C}$ -X-C motif) ligand 1 (Cxcl1) in wild-type, but not Sting<sup>-/-</sup>, mice. It inhibits the cytopathic effect of the common cold human coronavirus 229E (HCoV-229E) in infected MRC-5 cells (EC<sub>50</sub> = 3 nM). diABZI STING agonist-1 also decreases the levels of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA in primary human bronchial airway epithelial cells in an air-liquid interface assay.<sup>2</sup> 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.<sup>3</sup>

#### References

- 1. Ramanjulu, J.M., Pesiridis, G.S., Yang, J., et al. Nature 564(7736), 439-443 (2018).
- 2. Stitt, A., Gardiner, T.A., Alderson, N.L., et al. Diabetes 51(9), 2826-2832 (2002).
- 3. Song, Z., Wang, X., Zhang, Y., et al. J. Med. Chem. 64(3), 1649-1669 (2021).

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

#### SAFFTY 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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