

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **PRODUCT** INFORMATION



MSA-2

Item No. 30140

CAS Registry No.: MF:	129425-81-6 C <sub>14</sub> H <sub>14</sub> O <sub>5</sub> S		
Synonym:	5,6-dimethoxy-γ-oxo-benzo[b]	S O	
	thiophene-2-Butanoic Acid		
FW:	294.3		
Purity:	≥98%		
UV/Vis.:	λ <sub>max</sub> : 213, 238, 324 nm		}—он
Supplied as:	A crystalline solid		0
Storage:	-20°C		
Stability:	≥2 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis			

#### Laboratory Procedures

MSA-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the MSA-2 in the solvent of choice, which should be purged with an inert gas. MSA-2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MSA-2 in ethanol is approximately 1 mg/ ml and approximately 30 mg/ml in DMSO and DMF.

#### Description

MSA-2 is an agonist of stimulator of interferon genes (STING).<sup>1</sup> It binds to wild-type and HAQ variant STING in a <sup>3</sup>H-cGAMP filtration binding assay (EC<sub>50</sub>s = 2.48 and 1.72  $\mu$ M, respectively) and induces secretion of IFN- $\beta$  from THP-1 cells by 129% relative to induction by 2'3'-cGAMP (Item No. 19887) when used at a concentration of 30 µM. MSA-2 reduces tumor growth in an MC-38 syngeneic mouse model of colon carcinoma in a dose-dependent manner and induces tumor regression when administered intratumorally or subcutaneously at doses of 450  $\mu$ g and 50 mg/kg, respectively.<sup>2</sup> It also acts synergistically with an anti-PD-1 antibody in MC-38, CT26, B16/F10, and LL/2 syngeneic mouse models.

#### References

- 1. Altman, M.D., Cash, B.D., Chang, W., et al. Benzo[B]thiophene compounds as STING agonists. Merck Sharp & Dohme Corp. US20180093964A1 (2018).
- 2. Pan, B.-S., Perera, S.A., Piesvaux, J.A., et al. An orally available non-nucleotide STING agonist with antitumor activity. Science 369 (6506), eaba6098 (2020).

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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#### 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