# **PRODUCT INFORMATION**



**BSP-16** 

Item No. 37992

CAS Registry No.: 2727249-47-8

Formal Name: αR-ethyl-5,6-dimethoxy-γ-oxo-

benzo[b]selenophene-2-butanoic acid

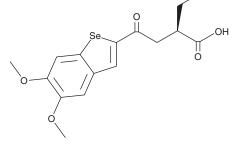
Synonym:

MF: C<sub>16</sub>H<sub>18</sub>O<sub>5</sub>Se 369.3 FW: **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 218, 332 nm

Supplied as: A solid Storage: -20°C Stability: ≥3 years

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



### Description

BSP-16 is a stimulator of interferon genes (STING) agonist. It binds to STING ( $K_d = 23 \mu M$ ) and induces the production of IFN-β, IL-6, and chemokine (C-X-C motif) ligand 10 (CXCL10) in THP-1 cells when used at concentrations of 10, 25, and 50 μM. BSP-16 (50 μM) induces phosphorylation of IFN regulatory factor 3 (IRF3) and TANK-binding kinase 1 (TBK1) in THP-1 cells. In vivo, BSP-16 (15 and 30 mg/kg) reduces tumor volume in an MC-38 murine carcinoma model and induces tumor regression in a CT26 murine colorectal carcinoma model. It prevents tumor cell re-challenge-induced tumor formation in a CT26 murine carcinoma model. BSP-16 (20 mg/kg) also reduces tumor volume and increases the number of activated CD8<sup>+</sup> T cells and natural killer (NK) cells in a 4T1 murine mammary carcinoma model.

### Reference

1. Feng, X., Pan, L., Qian, Z., et al. Discovery of selenium-containing STING agonists as orally available antitumor agents. J. Med. Chem. 65(22), 15048-15065 (2022).

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

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