# **PRODUCT** INFORMATION



## **BAY-8002**

Item No. 34231

CAS Registry No.:	724440-27-1	
Formal Name:	2-[[2-chloro-5-(phenylsulfonyl)	$\sim$
	benzoyl]amino]-benzoic acid	
MF:	C <sub>20</sub> H <sub>14</sub> CINO <sub>5</sub> S	
FW:	415.8	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 214, 244 nm	Ŭ
Supplied as:	A solid	
Storage:	-20°C	OF HO
Stability:	≥4 years	

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

#### Laboratory Procedures

BAY-8002 is supplied as a solid. A stock solution may be made by dissolving the BAY-8002 in the solvent of choice, which should be purged with an inert gas. BAY-8002 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BAY-8002 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

BAY-8002 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAY-8002 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BAY-8002 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

BAY-8002 is an inhibitor of monocarboxylate transporter 1 (MCT1; IC<sub>50</sub> = 11.4 nM).<sup>1</sup> It inhibits lactate uptake in DLD-1 cells expressing human MCT1 (IC<sub>50</sub> = 85 nM) but not Evsa-T cells expressing human MCT4 (IC<sub>50</sub> = >50  $\mu$ M).<sup>1</sup> It inhibits the proliferation of 24 cancer cell lines when used at a concentration of 10  $\mu$ M. BAY-8002 (50 and 100 mg/kg) reduces intratumor lactate levels and tumor area in a Raji mouse xenograft model.

#### Reference

1. Quanz, M., Bender, E., Kopitz, C., et al. Preclinical efficacy of the novel monocarboxylate transporter 1 inhibitor BAY-8002 and associated markers of resistance. Mol. Cancer Ther. 17(11), 2285-2296 (2018).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/03/2023

### 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