# **PRODUCT** INFORMATION



**SS-208** 

Item No. 29128

CAS Registry No.:	2245942-72-5	
Formal Name:	5-[2-[(3,4-dichlorobenzoyl)	Cl.
	amino]ethyl]-N-hydroxy-3-	Н
	isoxazolecarboxamide	I I I
MF:	C <sub>13</sub> H <sub>11</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>4</sub>	
FW:	344.2	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 237 nm	~NОН
Supplied as:	A crystalline solid	н́
Storage:	-20°C	
Stability:	≥2 years	

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

# Laboratory Procedures

SS-208 is supplied as a crystalline solid. A stock solution may be made by dissolving the SS-208 in the solvent of choice, which should be purged with an inert gas. SS-208 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SS-208 in ethanol is approximately 30 mg/ml and approximately 1 mg/ml in DMSO and DMF.

SS-208 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SS-208 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. SS-208 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

SS-208 is an inhibitor of histone deacetylase 6 (HDAC6;  $IC_{50} = 12 \text{ nM}$ ).<sup>1</sup> It is selective for HDAC6 over HDAC1, -4, -5, -7, -8, -9, and -11 (IC<sub>50</sub>s = 1.39, 19.5, 6.91, 8.34, 1.23, 38.2, and 5.12 μM, respectively). SS-208 (0.1-25 µM) inhibits HDAC6 in, but does not induce cell death of, human PC3 prostate, 5637 and T24 bladder, and murine SM1 melanoma cells in vitro. It decreases protein levels of programmed death ligand 1 (PD-L1) in SM1 cells when used at a concentration of 5  $\mu$ M. SS-208 (25 mg/kg, i.p.) reduces tumor growth and increases the number of intratumoral CD8<sup>+</sup>, CD4<sup>+</sup>, and natural killer (NK) T cells in an SM1 murine melanoma model.

# Reference

1. Shen, S., Hadley, M., Ustinova, K., et al. Discovery of a new isoxazole-3-hydroxamate-based histone deacetylase 6 inhibitor SS-208 with antitumor activity in syngeneic melanoma mouse models. J. Med. Chem. 62(18), 8557-8577 (2019).

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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