

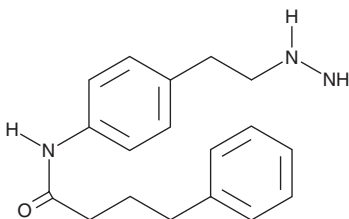
PRODUCT INFORMATION



Bizine

Item No. 19705

CAS Registry No.: 1591932-50-1
Formal Name: N-[4-(2-hydrazinylethyl)phenyl]-benzenebutanamide
MF: C₁₈H₂₃N₃O
FW: 297.4
Purity: ≥95%
UV/Vis.: λ_{max}: 246 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Bizine is supplied as a crystalline solid. A stock solution may be made by dissolving the bizine in the solvent of choice, which should be purged with an inert gas. Bizine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of bizine in these solvents is approximately 25 and 20 mg/ml, respectively.

Bizine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bizine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Bizine has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Bizine is a phenelzine analog that inhibits lysine-specific demethylase 1 (LSD1; $K_{i(\text{inact})} = 59 \text{ nM}$).¹ It is 23-fold, 63-fold, and >100-fold selective for LSD1 over monoamine oxidase (MAO) A, MAOB, and LSD2, respectively.¹ Bizine has been shown to induce bulk histone H3 lysine 4 dimethylation in LNCaP cancer cells ($EC_{50} = \sim 2 \text{ } \mu\text{M}$) and, at 0.5 μM , to protect neurons exposed to oxidative stress.¹

Reference

1. Prusevich, P., Kalin, J.H., Ming, S.A., *et al.* A selective phenelzine analogue inhibitor of histone demethylase LSD1. *ACS Chem Biol.* **9**, 1284-1293 (2014).

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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