

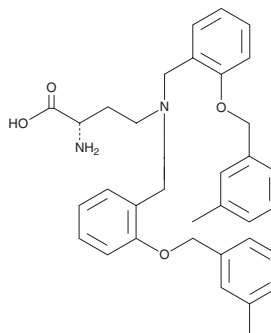
PRODUCT INFORMATION



V-9302

Item No. 27688

CAS Registry No.: 1855871-76-9
Formal Name: (2S)-2-amino-4-[bis[[2-[(3-methylphenyl)methoxy]phenyl]methyl]amino]-butanoic acid
MF: C₃₄H₃₈N₂O₄
FW: 538.7
Purity: ≥95%
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

V-9302 is supplied as a crystalline solid. A stock solution may be made by dissolving the V-9302 in the solvent of choice, which should be purged with an inert gas. V-9302 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of V-9302 in these solvents is approximately 20, 30, and 25 mg/ml, respectively.

V-9302 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, V-9302 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. V-9302 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

V-9302 is an inhibitor of amino acid transporter 2 (ASCT2).¹ It inhibits glutamine uptake with IC₅₀ values of 9 and 9.6 μM for the rat and human transporters, respectively. V-9302 also inhibits glutamine uptake in HEK293 cells and reduces cell viability of a variety of cancer cell lines, including HCT116, HT-29, COLO 205, and RKO cells (EC₅₀s = 8.9, 9.4, 14.5, and 8.3 μM, respectively).² It reduces glutamine uptake into tumor tissue and prevents tumor growth in HCT116 and HT-29 mouse xenograft models expressing *K-Ras*^{G13D} and *BRAF*^{V600E} mutations, respectively, when administered at a dose of 75 mg/kg per day for 21 days.

References

- Schulte, M.L., Khodadadi, A.B., Cuthbertson, M.L., *et al.* 2-Amino-4-bis(aryloxybenzyl)aminobutanoic acids: A novel scaffold for inhibition of ASCT2-mediated glutamine transport. *Bioorg. Med. Chem. Lett.* **26**(3), 1044-1047 (2016).
- Schulte, M.L., Fu, A., Zhao, P., *et al.* Pharmacological blockade of ASCT2-dependent glutamine transport leads to antitumor efficacy in preclinical models. *Nat. Med.* **24**(2), 194-202 (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

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