

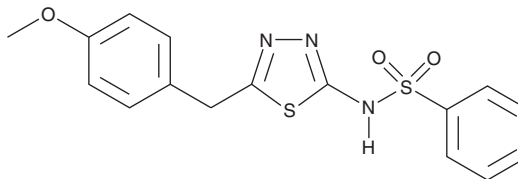
PRODUCT INFORMATION



OU749

Item No. 13804

CAS Registry No.: 519170-13-9
Formal Name: N-[5-[(4-methoxyphenyl)methyl]-1,3,4-thiadiazol-2-yl]-benzenesulfonamide
MF: C₁₆H₁₅N₃O₃S₂
FW: 361.4
Purity: ≥95%
UV/Vis.: λ_{max}: 203, 223, 274 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

OU749 is supplied as a crystalline solid. A stock solution may be made by dissolving the OU749 in the solvent of choice, which should be purged with an inert gas. OU749 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of OU749 in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

OU749 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, OU749 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. OU749 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

γ-Glutamyl transferase (GGT) is involved in the transfer of amino acids across the plasma membrane as well as in glutathione metabolism.¹ Serum GGT activity is commonly used as a marker of liver dysfunction and alcohol abuse. It is also useful as a biomarker of type 2 diabetes and cardiovascular disease.¹ OU749 is a non-competitive inhibitor of GGT, exhibiting a K_i value of 17.6 μM.² It is 150-fold less toxic than the GGT inhibitor acivicin toward dividing cells. OU749 inhibits human GGT 7- to 10-fold more potently than rat or murine GGT and does not inhibit porcine GGT.²

References

1. Targher, G. Elevated serum γ-glutamyltransferase activity is associated with increased risk of mortality, incident type 2 diabetes, cardiovascular events, chronic kidney disease and cancer - a narrative review. *Clin. Chem. Lab. Med.* **48(2)**, 147-157 (2010).
2. King, J.B., West, M.B., Cook, P.F., et al. A novel, species-specific class of uncompetitive inhibitors of γ-glutamyl transpeptidase. *J. Biol. Chem.* **284(14)**, 9059-9065 (2009).

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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