PRODUCT INFORMATION



BVT 14225

Item No. 41224

CAS Registry No.: 376638-65-2

Formal Name: 2-[[(3-chloro-2-methylphenyl)

sulfonyl]amino]-N,N-diethyl-4-

thiazoleacetamide

MF: $C_{16}H_{20}CIN_3O_3S_2$

401.9 FW: **Purity:** ≥98% Supplied as: A 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

BVT 14225 is supplied as a solid. A stock solution may be made by dissolving the BVT 14225 in the solvent of choice, which should be purged with an inert gas. BVT 14225 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

BVT 14225 is an inhibitor of 11 β -hydroxysteroid dehydrogenase type 1 (11 β -HSD1; IC₅₀s = 52 and 284 nM for the human and mouse enzymes, respectively). It is selective for human 11β-HSD1 over human 11β-HSD2 (IC₅₀ = >10,000 nM). It inhibits 11β-HSD1 by 55% in HEK293 cells expressing human HSD11B1, the gene encoding 11β-HSD1, when used at a concentration of 10 μM.² BVT 14225 (50 mg/kg) reduces blood glucose levels in a rat model of diabetes induced by streptozotocin (Item No. 13104) and nicotinamide (Item No. 11127).

References

- 1. Barf, T., Vallgårda, J., Emond, R., et al. Arylsulfonamidothiazoles as a new class of potential antidiabetic drugs. Discovery of potent and selective inhibitors of the 11β-hydroxysteroid dehydrogenase type 1. J. Med. Chem. 45(18), 3813-3815 (2002).
- 2. Navarrete-Vázquez, G., Morales-Vilchis, M.G., Estrada-Soto, S., et al. Synthesis of 2-{2-[(α/β-naphthalen-1-ylsulfonyl)amino]-1,3-thiazol-4-yl} acetamides with 11β-hydroxysteroid dehydrogenase inhibition and in combo antidiabetic activities. Eur. J. Med. Chem. 74, 179-186 (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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