

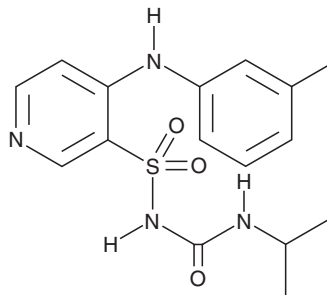
PRODUCT INFORMATION



Toraseamide

Item No. 21312

CAS Registry No.: 56211-40-6
Formal Name: N-[[[(1-methylethyl)amino]carbonyl]-4-[(3-methylphenyl)amino]-3-pyridinesulfonamide
Synonyms: BM 02015, Torsemide
MF: C₁₆H₂₀N₄O₃S
FW: 348.4
Purity: ≥98%
UV/Vis.: λ_{max}: 287 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

Toraseamide is supplied as a crystalline solid. A stock solution may be made by dissolving the toraseamide in the solvent of choice. Toraseamide is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of toraseamide in these solvents is approximately 1 mg/ml.

Toraseamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, toraseamide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Toraseamide has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Toraseamide is structurally categorized as an anilinopyridine sulfonylurea. It belongs to a class of diuretics that functions in the thick ascending limb of the loop of Henle, inhibiting the Na⁺/K⁺/2Cl⁻ cotransporter, which enhances the excretion of sodium, chloride, and water from the luminal side of the cells.^{1,2} Diuretics, including toraseamide, have been abused as performance-enhancing drugs and masking agents in doping in sports.³

References

1. Reyes, A.J. Diuretics in the therapy of hypertension. *J. Hum. Hypertens.* **16**, 78-83 (2002).
2. Beck, F.-X., Sone, M., Dorge, A., et al. Effect of loop diuretics on organic osmolytes and cell electrolytes in the renal outer medulla. *Kidney Int.* **42**(4), 843-850 (1992).
3. Cadwallader, A.B., de la Torre, X., Tieri, A., et al. The abuse of diuretics as performance-enhancing drugs and masking agents in sport doping: Pharmacology, toxicology and analysis. *Br. J. Pharmacol.* **161**(1), 1-16 (2010).

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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