Tizoxanide
Item No. 13693

CAS Registry No.: 173903-47-4
Formal Name: 2-hydroxy-N-(5-nitro-2-thiazolyl)benzamide
MF: C_{11}H_{7}N_{3}O_{4}S
FW: 265.3
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λ_{max}^\text{UV/Vis.}: 413 nm

Laboratory Procedures
For long term storage, we suggest that tizoxanide be stored as supplied at -20°C. It should be stable for at least two years.
Tizoxanide is supplied as a crystalline solid. A stock solution may be made by dissolving the tizoxanide in the solvent of choice. Tizoxanide is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of tizoxanide in these solvents is approximately 5 mg/ml.
Tizoxanide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tizoxanide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Tizoxanide has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.
Tizoxanide is the active metabolite of nitazoxanide, an anti-infective that has been approved for the treatment of diarrhea caused by Giardia lamblia or Cryptosporidium parvum. Tizoxanide is active against anaerobic bacteria, protozoan parasites, and viruses. It reduces the growth of the disease-causing parasites, Leishmania mexicana and Trypanosoma cruzi, in vitro (IC_{50} = 6.2 and 17.5 μM, respectively), inhibits influenza A replication (EC_{50} = 0.3-1 μM), and inhibits hepatitis B and hepatitis C virus replication (EC_{50} both = 0.15 μM).

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13693

WARNING: This Product is for Laboratory Research Only: Not for Administration to Humans. Not for Human or Veterinary Diagnostic or Therapeutic Use.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent with this product.

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