PRODUCT INFORMATION

Todralazine (hydrochloride)
Item No. 20893

CAS Registry No.: 3778-76-5
Formal Name: 2-(1-phthalazinyl)-hydrazinecarboxylic acid, ethyl ester, monohydrochloride
Synonyms: Apirachol, Binazine, Ecarazine
MF: C_{11}H_{12}N_{4}O_{2}•HCl
FW: 268.7
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 303, 315 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

Todralazine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the todralazine (hydrochloride) in the solvent of choice. Todralazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of todralazine (hydrochloride) in these solvents is approximately 1, 10, and 5 mg/ml, respectively.

Todralazine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, todralazine (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Todralazine (hydrochloride) 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

Todralazine (hydrochloride) is a β_{2}-adrenergic receptor antagonist with peripheral vasodilator activity.\(^1,2\) Administration of todralazine (5 µM) to pre-larval zebrafish led to hematopoietic cell expansion and protection from ionizing radiation.\(^2\) It inhibited histone acetylation \textit{in vitro} and, long-term (4 months), but not short-term (1 month), treatment in mice (3 mg/day) impaired hepatocyte histone acetylation and liver regeneration.\(^3\)

References