

Certificate of Analysis

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Print Date: Jan 13th 2016

Product Name: ZAPA sulfate Catalog No.: 0180 Batch No.: 3

CAS Number: 371962-01-5

IUPAC Name: (Z)-3-[(Aminoiminomethyl)thio]prop-2-enoic acid sulfate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_4H_6N_2O_2S.H_2SO_4$

Batch Molecular Weight: 244.24

Physical Appearance: White crystalline solid

Solubility: water to 10 mM Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure



Product Information

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Description:

More potent than either GABA or muscimol as an agonist at low affinity $GABA_A$ receptors and is thus a useful ligand to investigate GABA receptors linked to benzodiazepine receptors. Also a $GABA_A$ -p receptor antagonist.

Physical and Chemical Properties:

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Storage: Store at RT

Solubility & Usage Info:

water to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Allan et al (1986) Isothiouronium compounds as y-aminobutyric acid agonists. Br.J.Pharmacol. 88 379. PMID: 3015310.

Holden-Dye and Walker (1988) ZAPA, (Z)-3-[(aminoiminomethyl)thio]-2-propenoic acid hydrochloride, a potent agonist at GABA-receptors on the *Ascaris* muscle cell. Br.J.Pharmacol. *95* 3. PMID: 2851353.

Johnston (1996) GABA_C receptors: relatively simple transmitter-gated ion channels? TiPS 17 319. PMID: 8885697.