

Certificate of Analysis

www.tocris.com

Product Name: Salbutamol hemisulfate

Catalog No.: 0634

Batch No.: 6

CAS Number: 51022-70-9

EC Number: 256-916-8

IUPAC Name: α^1 -[[[(1,1-Dimethylethyl)amino]methyl]-4-hydroxy-1,3-benzenedimethanol hemisulfate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₂₁NO₃.1/2H₂SO₄

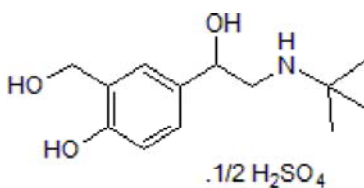
Batch Molecular Weight: 288.35

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.15	7.69	4.86
Found	54.12	7.71	4.9

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: Salbutamol hemisulfate

Catalog No.: 0634

Batch No.: 6

CAS Number: 51022-70-9

EC Number: 256-916-8

IUPAC Name: α^1 -[[[(1,1-Dimethylethyl)amino]methyl]-4-hydroxy-1,3-benzenedimethanol hemisulfate

Description:

Salbutamol hemisulfate is a selective β_2 -adrenergic agonist with 29-fold higher selectivity for β_2 over β_1 receptors. Salbutamol elevates fibroblast growth factor 20 (FGF20) in nigrostriatal neurons, and is neuroprotective in a mouse model of Parkinson's disease.

Physical and Chemical Properties:

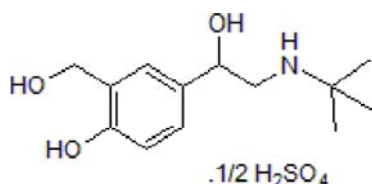
Batch Molecular Formula: C₁₃H₂₁NO₃.1/2H₂SO₄

Batch Molecular Weight: 288.35

Physical Appearance: White solid

Minimum Purity: $\geq 99\%$

Batch Molecular Structure:



References:

Fletcher et al (2019) Targeted repositioning identifies drugs that increase fibroblast growth factor 20 production and protect against 6-hydroxydopamine-induced nigral cell loss in rats. *Sci.Rep.* **9**. PMID: 31171821.

Baker (2005) The selectivity of beta-adrenoceptor antagonists at the human β_1 , β_2 and β_3 adrenoceptors. *Br.J.Pharmacol.* **144** 317. PMID: 15655528.

January et al (1998) Salmeterol-induced desensitisation, internalization and phosphorylation of the human β_2 -adrenoceptor. *Br.J.Pharmacol.* **123** 701. PMID: 9517390.

Storage: Store at RT

Solubility & Usage Info:

water to 100 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.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956