

Certificate of Analysis

Product Name: ST 034307

Catalog No.: 6271

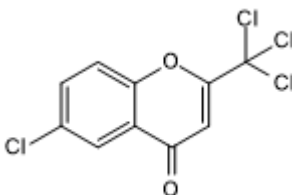
Batch No.: 1

CAS Number: 133406-29-8

IUPAC Name: 6-Chloro-2-(trichloromethyl)-4*H*-1-benzopyran-4-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₄Cl₄O₂
Batch Molecular Weight: 297.95
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
 ethanol to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	40.31	1.35	
Found	40.43	1.23	

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

Product Name: ST 034307

Catalog No.: 6271

Batch No.: 1

CAS Number: 133406-29-8

IUPAC Name: 6-Chloro-2-(trichloromethyl)-4H-1-benzopyran-4-one

Description:

Adenylyl cyclase 1 (AC1) inhibitor ($IC_{50} = 2.3 \mu M$). Exhibits some selectivity for AC1 over other AC isoforms, with no significant activity against AC8. Inhibits Ca^{2+} /calmodulin-stimulated cAMP accumulation in hippocampal homogenates. Enhances μ opioid receptor (MOR)-mediated inhibition of AC1 in cellular assays and inhibits development and maintenance of MOR-mediated sensitization of AC1. Active in vivo. Analgesic.

Physical and Chemical Properties:

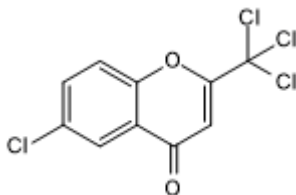
Batch Molecular Formula: $C_{10}H_4Cl_4O_2$

Batch Molecular Weight: 297.95

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Brust et al (2017) Identification of a selective small-molecule inhibitor of type 1 adenylyl cyclase activity with analgesic properties. *Sci.Signal.* **10** eaah5381. PMID: 28223412.

Storage: Store at $-20^{\circ}C$

Solubility & Usage Info:

DMSO to 100 mM
ethanol to 20 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 $45-60^{\circ}C$ 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 $-20^{\circ}C$ 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