

ST-034307, Adenylate cyclase 1 inhibitor; Analgesic activity

Catalog	Unit
TBI1620-5MG	5 mg
TBI1620-25MG	25 mg

Product Details

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

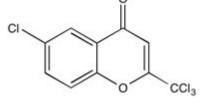
Molecular Formula: C₁₀H₄Cl₄O₂ **Formula Weight:** 297.95 **CAS Number:** 133406-29-8

Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 30 mg/ml) or in Ethanol (up to 6 mg/ml)

Storage: RT **Stability:** ≥ 1 year.



Applications

Adenylate cyclase 1 inhibitor; Analgesic activity

Functions

A novel selective adenylyl cyclase 1 (AC1) inhibitor, IC_{50} =2.3 μM . Inhibits calcium²⁺-stimulated cAMP accumulation in HEK cells stably transfected with AC1. It was also shown to inhibit AC1 stimulated by forskolin- and G α s-coupled receptors in HEK-AC1 cells. It enhanced μ -opioid receptor-mediated inhibition of AC1 but it blocked heterologous sensitization of AC1 caused by chronic μ -opioid receptor activation. Displays analgesic properties in a mouse model of inflammatory pain.

Application Procedures

First dissolved in DMSO (up to 30 mg/ml) or in Ethanol (up to 6 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.