# abcam

### Product datasheet

# Sinomenine hydrochloride, Morphinan analog ab141190

## 1 References 2 Images

#### Overview

Product name Sinomenine hydrochloride, Morphinan analog

**Description** Natural anti-inflammatory morphinan analog; potently releases histamine

Biological description Natural anti-inflammatory morphinan analog, able to weakly bind to the µ-opioid receptor. Potently

releases histamine following mast cell degranulation. Inhibits oligomeric amyloid-β-induced increases in ROS, NO and other inflammatory molecules. Stimulates acute renewal of human

embryonic stem cells (ESCs) in vitro.

**Purity** > 98%

**CAS Number** 6080-33-7

Chemical structure CH3 .HCI

#### **Properties**

 $\textbf{Chemical name} \hspace{1.5cm} (9\alpha,13\alpha,14\alpha)-7,8-\text{Didehydro-4-hydroxy-3},7-\text{dimethoxy-17-methylmorphinan-6-one hydrochloride})$ 

Molecular weight 365.86

**Molecular formula** C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub>.HCI

PubChem identifier 5464452

Storage instructions Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

**Solubility overview** Soluble in water to 100 mM

Handling Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

prior to opening the vial we recommend that you allow your product to equilibrate to room

temperature for at least 1 hour.

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Refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

**SMILES** CI.COC3=C[C@@H]4C2Cc1ccc(OC)c(O)c1[C@]4(CCN2C)CC3=O

Source Sinomenium acutum

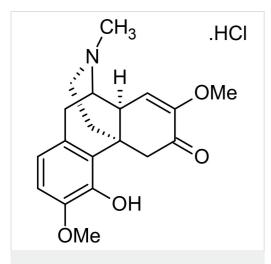
#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab141190 in the following tested applications.

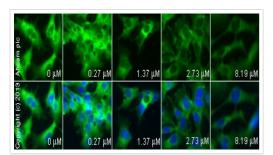
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

#### **Images**



Chemical Structure - Sinomenine hydrochloride, Morphinan analog (ab141190) 2D chemical structure image of ab141190, Sinomenine hydrochloride, Morphinan analog



Functional Studies - Sinomenine hydrochloride, Morphinan analog (ab141190) <u>ab15191</u> staining COX2 in HepG2 cells treated with sinomenine hydrochloride (ab141190), by ICC/IF. Decrease of COX2 expression correlates with increased concentration of sinomenine hydrochloride, as described in literature.

The cells were incubated at  $37^{\circ}$ C for 48 hours in media containing different concentrations of ab141190 (sinomenine hydrochloride) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab15191** (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A

DyLight 488 anti-rabbit polyclonal antibody (<u>ab96899</u>) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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