abcam

Product datasheet

4-DAMP, Muscarinic receptor antagonist ab120144

4 References 2 Images

Overview

Product name 4-DAMP, Muscarinic receptor antagonist

Description Muscarinic receptor antagonist

Biological description Muscarinic antagonist. (K_i values for human receptors are 0.57 (M₁), 7.3 (M₂), 0.37 (M₃), 0.72

 (M_4) and 0.55 nM (M_5)).

CAS Number 1952-15-4

Chemical structure

H₃C -N+

Properties

Chemical name 4-Diphenylacetoxy-N-methylpiperidine methiodide

Molecular weight 451.35

Molecular formula $C_{21}H_{26}INO_2$

PubChem identifier 3014059

Storage instructions Store at Room Temperature. The product can be stored for up to 12 months.

Solubility overview Soluble in DMSO to 100 mM and in ethanol to 25 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.

Need more advice on solubility, usage and handling? Please visit our **frequently asked**

questions (FAQ) page for more details.

SMILES [I-].O=C(OC1CC[N+](C)(C)CC1)C(c2cccc2)c3ccccc3

Source Synthetic

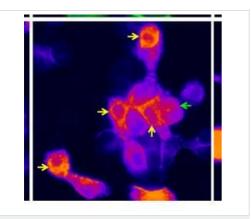
1

Images

$$H_3C$$
 $I^ H_3C^-N^+$
 O

2D chemical structure image of ab120144, 4-DAMP, Muscarinic receptor antagonist

Chemical Structure - 4-DAMP, Muscarinic receptor antagonist (ab120144)



Cellular activation - 4-DAMP, Muscarinic receptor antagonist (ab120144)

Image from Lee BH, et al. Plos One, 8(1), e53113. Fig 2,; doi: 10.1371/journal.pone.0053113

- (A) rhAQP5 vector-transfected HSG cells were stimulated with CCh (100 μ M) in the presence or absence of 4-DAMP (10 μ M), prenzepine (10 μ M), and mixture of 4-DAMP and prenzepine (M3R or M1R specific antagonist, respectively).
- (B) To monitor hAQP5 trafficking, original GFP pictures in (A) were converted into 'Fire' 3D LUT (lookup tables) setting in ImageJ software and only GFP signal above the fluorescent signal threshold (?80, red or yellow color in converted picture), was captured in (B) as positive GFP signal. Yellow arrows indicate the positive GFP signal on the membrane and green arrows indicates signal in the cytoplasm in HSG cells.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team