Overview

Product name
Hydralazine hydrochloride

Description
DNA methylation inhibitor. Antihypertensive agent.

Biological description
Inhibits DNA methylation by inhibition of MAPK (EC_{50} = 2.96 μM). Multiple, direct effects on vascular smooth muscle; hyperpolarization, inhibition of IP_3-induced release of Ca^{2+} and formation of NO leading to cGMP-mediated vasodilation. DNMT inhibitor (IC_{50} = 2 μM).

Purity
> 99%

Properties

Chemical name
1-Hydrazinylthalazine hydrochloride

Molecular weight
196.64

Molecular formula
C_{8}H_{8}N_{4}.HCl

CAS Number
304-20-1

Storage instructions
Store at Room Temperature. 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.

Toxic, refer to SDS for further information.

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

Source
Synthetic
Jurkat cells were incubated at 37°C for 5 days with vehicle control (0 µM) and different concentrations of hydralazine hydrochloride (ab120863). Decreased expression of DNMT1 (ab19905) in Jurkat cells correlates with an increase in hydralazine hydrochloride concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 20 µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab19905 at 1 µg/ml and ab8227 at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (ab97051) at 1/10000 dilution and visualised using ECL development solution.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, 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](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