Spermine NONOate, Nitric oxide (NO) donor ab144522

Overview

Product name: Spermine NONOate, Nitric oxide (NO) donor
Description: Nitric oxide (NO) donor
Biological description: NO donor (EC_{50} = 6.2 μM, rabbit aorta relaxation). Stable nitric oxide and spermine complex. Spontaneously releases NO in a pH-dependent manner with a half-life of 39 minutes.
Purity: >97%
CAS Number: 136587-13-8
Chemical structure:

![Chemical Structure Image]

Properties

Chemical name: N-[3-Aminopropyl-[4-(3-aminopropylamino)butyl]amino]-N-hydroxy nitrous amide
Molecular weight: 262.35
Molecular formula: C_{10}H_{26}N_{6}O_{2}
PubChem identifier: 5259
Storage instructions: Store at -20°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.

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

SMILES: C(CCN(CCCN)N(N=O)O)CNCCCN

Source: Synthetic
Effect of NO on HaCaT cell migration.

An *in vitro* wound model was developed using cultured sheets of confluent HaCaT cells, as described in the Materials and Methods section. The cells were incubated in the absence or presence of different concentrations of NO donors SNP, spermine NONOate or SNAP. At the designated time points, the cells were imaged under phase contrast microscopy. The closures of the artificial wounds stimulated by SNP (a), spermine NONOate (c) and SNAP (e) were measured. The percentage of the migrated area in the original scratch field was calculated via image analysis and was expressed as the mean ± SD of different wells (b, d, f). Three independent experiments were performed. (b) Quantitative analysis of (a). (d) Quantitative analysis of (c). (f) Quantitative analysis of (e).

Panel d shown only.

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

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