

## SIN-1

Generate nitric oxide and form superoxides spontaneously under physiological conditions and is often used to probe the cell stress response and induce cGMP production.



### Product attributes

CAS number	16142-27-1
Molecular weight	206.7
Storage Conditions	Store at -10 to -35 °C or below, Desiccate

## Product Description

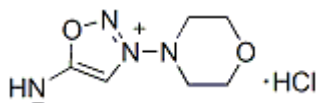
SIN-1 (Morpholinosydnonimine, hydrochloride) releases nitric oxide and forms superoxide spontaneously under physiological conditions; stimulates cGMP production; and has been shown to be a potent vasodilator.

- Generate nitric oxide and superoxides
- Stimulates cyclic GMP production
- White solid soluble in water and DMSO

[Fluorescent calcium indicators](#) and SIN-1 are often used to probe the cellular reactions to cell stress, NO, and trace intracellular calcium. It has been shown to be a potent vasodilator in vivo and in vitro and to inhibit smooth muscle cell mitogenesis and proliferation. NO concentration is often assessed by measuring nitrite level using the [Griess Reagent](#).

If a variety of nitric oxide generators are needed, we offer a [Nitric Oxide Generation Kit](#) which has 10mg each of SIN-1 ([00221](#)), SNAP ([00222](#)), S-nitrosoglutathione ([00223](#)), spermine NONOate ([00224](#)), and DEA-NONOate ([00225](#)).

Molecular Structure:



## References

1. J Pharmacol Exp Ther 248, 762 (1989), [J Pharmacol Exp Ther 248, 762 \(1989\)](#)
2. Nature 364, 626 (1993), [DOI: 10.1038/364626a0](#)
3. Bioorg Med Chem Lett. 21, 6515 (2011), [DOI: 10.1016/j.bmcl.2011.08.071](#)

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