

3-

# Morpholinosydnonimine

Releases NO and superoxide anion under physiological conditions

SIN-1 is a metabolite of molsidomine which decomposes spontaneously in solution in the presence of oxygen, releasing NO and superoxide anion under physiological conditions. Since NO and superoxide react to form peroxynitrite, SIN-1 may actually produce peroxynitrite under physiological conditions. It is a potent vasodilator and inhibitor of platelet aggregation and produces significant protective effects in myocardial ischemia-reperfusion. The effects of SIN-1 are markedly attenuated by nitroglycerin-induced tolerance. Inhibits cysteine proteases.

Citations: 18

[View Online »](#)

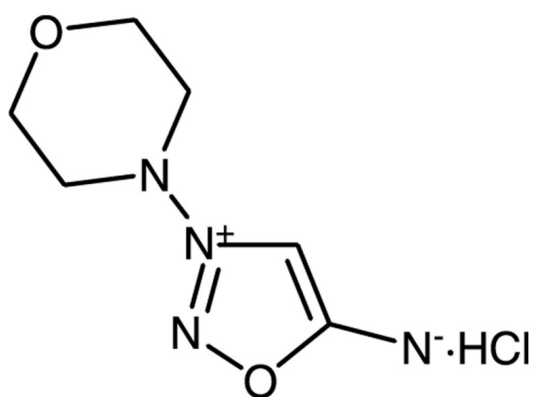
## Ordering Information

[Order Online »](#)

BML-CN245-0020	20mg
BML-CN245-0100	100mg

## Manuals, SDS & CofA

[View Online »](#)



N<sup>-</sup>·HCl

## Handling & Storage

**Use/Stability** As indicated on product label or CoA when stored as recommended.

**Handling** Use freshly prepared solutions.

**Long Term Storage** -20°C

**Shipping** Ambient Temperature

**Regulatory Status** RUO - Research Use Only

## Product Details

**Alternative Name** SIN-1, Linsidomine

**Appearance** White to off-white solid.

**CAS** 33876-97-0

**Couple Target** Protease

**Couple Type** Inhibitor

**Formula**  $C_6H_{10}N_4O_2 \cdot HCl$

**Identity** Determined by NMR.

**MW** 206.6

**MeltingPoint** 186-187°C

**Purity** ≥98% (HPLC)

**Solubility** Soluble in water (25mg/ml), 100% ethanol or DMSO (>5mg/ml).

Last modified: May 29, 2024



ENZO LIFE SCIENCES,  
INC.  
Phone: 800.942.0430  
[info-  
usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-  
eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-  
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-  
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-  
de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-  
uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)