

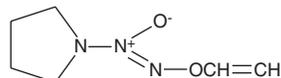
PRODUCT INFORMATION



V-PYRRO/NO

Item No. 82160

CAS Registry No.: 179344-98-0
Formal Name: 1-[(ethenyloxy)-NNO-azoxy]-pyrrolidine
MF: C₆H₁₁N₃O₂
FW: 157.2
Purity: ≥98%
UV/Vis.: λ_{max}: 268 nm
Supplied as: A 50 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

V-PYRRO/NO is supplied as a solution in ethanol. V-PYRRO/NO is soluble in solvents such as DMSO and dimethyl formamide. The solubility of V-PYRRO/NO in these solvents is approximately 40 mg/ml. Store stock solutions of V-PYRRO/NO on ice and use within 12 hours.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of V-PYRRO/NO is needed, it can be prepared by evaporating the ethanol and directly dissolving the product in aqueous buffers. The solubility of V-PYRRO/NO in PBS (pH 7.2) is approximately 5 mg/ml. Store aqueous solutions of V-PYRRO/NO on ice and use within 12 hours of preparation.

Description

V-PYRRO/NO is a metabolically activated NO donor drug that can be used to selectively target NO delivery to the liver.¹ Following hepatic metabolism, V-PYRRO/NO spontaneously decomposes with a half-life of 3 seconds liberating NO.¹ Unlike NO donors such as sodium nitroprusside, bolus infusion of V-PYRRO/NO at 30 nmol/kg in rats causes only a slight drop in blood pressure. At concentrations of 100 μM or greater, V-PYRRO/NO increases hepatocyte viability against TNFα-induced apoptosis by approximately 2-fold compared to cells not treated with V-PYRRO/NO.¹

Reference

1. Saavedra, J.E., Billiar, T.R., Williams, D.L., *et al.* Targeting nitric oxide (NO) delivery *in vivo*. Design of a liver-selective NO donor prodrug that blocks tumor necrosis factor-α-induced apoptosis and toxicity in the liver. *J. Med. Chem.* **40**, 1947-1954 (1997).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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