46117 Landing Parkway, Fremont, CA 94538 U.S.A. Tel: 1-510-265-1027; Fax: 1-510-265-1352

www.biotium.com

PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: SNAP (S-nitroso-N-acetylpenicillamine)

CATALOG NO. 00222

MOLECULAR $C_7H_{12}N_2O_4S$ **INFORMATION:** Mwt: 220

[79032-48-7]

O=N-S

CO₂H

NHCCH

PROPERTIES:

Color & FormLight green solidPurity \geq 98% by TLC

Soluble in water and DMSO

STORAGE AND HANDLING:

Store desiccated at -20 °C.

APPLICATION:

SNAP releases nitric oxide and forms superoxide spontaneously under physiological conditions and stimulates cyclic GMP production. It has been shown to be a potent vasodilator *in vivo* and *in vitro* and to inhibit smooth muscle cell mitogenesis and proliferation.

The relationship between NO generated from SNAP and intracellular calcium has been studied using fluorescent calcium indictors, which are also available from Biotium. The NO released from SNAP has also been reported to stimulate calcium-independent synaptic vesicle release, which can be detected with FM1-43 (also available from Biotium)

Also see SIN-1 (00221)

Ref: 1) Nishio, et al. Biochem. Biophys. Res. Comm. 221(1), 163(1996); 2) Gross, et al. Neuropharcology 33(7), 915(1994). 3) Am J Physiol, L9 (1994); 4) Life Sci 54, 1449 (1994); 5) Neuron 12, 1235 (1994).

TOXICITY: Unknown.

FIRST AID:

Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

Disclaimer: Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use. Biotium is not liable for any damage resulting from handling or contact with this product.