

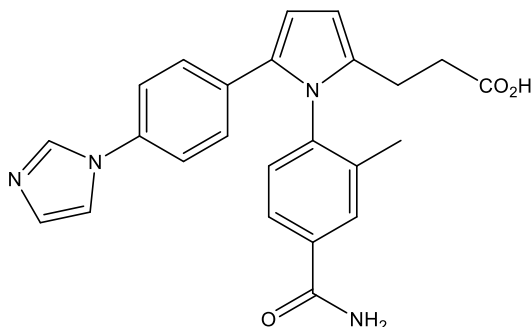
Catalog # 10-4103

N6022

CAS# 1208315-24-5

3-(5-(4-(1H-imidazol-1-yl)phenyl)-1-(4-carbamoyl-2-methylphenyl)-1H-pyrrol-2-yl)propanoic acid

Lot # FBS2041



N6022 is a potent and reversible inhibitor of S-nitrosoglutathione reductase (GSNOR) – $IC_{50} = 20 \text{ nM}^1$, 8 nM^2 . It demonstrated significant efficacy in mouse models of ovalbumin-induced asthma, chronic obstructive pulmonary disease, and irritable bowel syndrome. N6022 was able to attenuate experimental autoimmune encephalomyelitis (an animal model of multiple sclerosis) *via* selective inhibition of pro-inflammatory $CD4^+$ cells (T_H1/T_H17) while upregulating anti-inflammatory subsets of $CD4^+$ cells ($T_H2/Treg$) without causing lymphopenia.³

- 1) Sun *et al.* (2011), *Discovery of s-nitrosoglutathione reductase inhibitors: potential agents for the treatment of asthma and other inflammatory diseases*; ACS Med. Chem. Lett. **2** 402
- 2) Green *et al.* (2012), *Mechanism of inhibition for N6022, a first-in-class drug targeting S-nitrosoglutathione reductase*; Biochemistry **51** 2157
- 3) Saxena *et al.* (2019), *S-Nitrosoglutathione reductase (GSNOR) inhibitor as an immune modulator in experimental autoimmune encephalomyelitis*; Free Radic. Biol. Med. **121** 57

PHYSICAL DATA

Molecular Weight:	414.46
Molecular Formula:	$C_{24}H_{22}N_4O_3$
Purity:	>98% HPLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions at -20°C for up to 2 months.

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