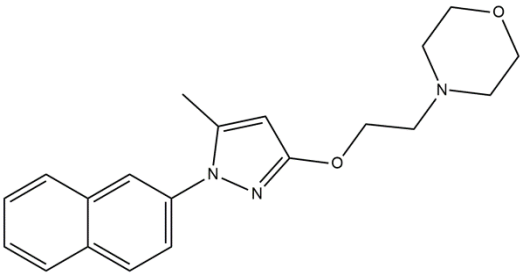
S1RA (E-52862)

06/20

ALTERNATE NAMES 4-[2-(5-methyl-1-naphthalen-2-ylpyrazol-3-yl)oxyethyl]morpholine; sigma 1 receptor antagonist

CATALOG #:
B3048-1 1 mg
B3048-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{20}H_{23}N_3O_2$

MOLECULAR WEIGHT: 337.42

CAS NUMBER: 878141-96-9

APPEARANCE: A crystalline solid

PURITY: ≥98%

SOLUBILITY:
~1 mg/ml in ethanol
~10 mg/ml in DMF
~15 mg/ml in DMSO

DESCRIPTION: S1RA is a highly selective sigma-1 (σ1) receptor antagonist. It shows high affinity for σ1 receptors with K_i values of 17 nM and 23.5 nM for human and guinea pig σ1 receptors respectively but no significant affinity for the σ2 receptors with K_i values of 1000 nM and 9300 nM for guinea pig and rat σ2 receptors respectively. It shows moderate affinity (K_i = 328 nM) and antagonistic activity with low potency at the human 5-HT2B receptor. S1RA inhibits neuropathic pain in formalin-induced nociception and capsaicin-induced mechanical hypersensitivity in mice. Sigma receptor modulators may show activity against SARS-CoV-2 as sigma receptors interact with SARS-CoV-2 proteins Nsp6 and Orf9c.

STORAGE TEMPERATURE: -20ºC

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:
Romero, L., Zamanillo, D., Nadal, X., et al. Pharmacological properties of S1RA, a new sigma-1 receptor antagonist that inhibits neuropathic pain and activity-induced spinal sensitization. Br J Pharmacology 166(8), 2289-2306 (2012).

RELATED PRODUCTS:

SA4503 dihydrochloride (Cat. No. B3046)
NE-100 hydrochloride (Cat. No. B3047)
Pridopidine (Cat. No. B3045)
Ditolylguanidine (Cat. No. B3044)
Remdesivir (Cat. No. B2997)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***