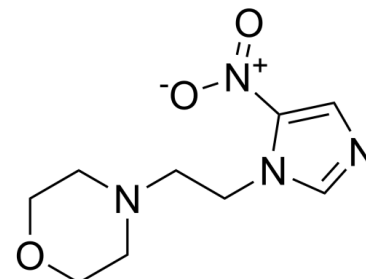


Data Sheet

Product Name:	Nimorazole
Cat. No.:	CS-2854
CAS No.:	6506-37-2
Molecular Formula:	C ₉ H ₁₄ N ₄ O ₃
Molecular Weight:	226.23
Target:	Antibiotic; Parasite
Pathway:	Anti-infection
Solubility:	DMSO : 33.33 mg/mL (ultrasonic)



BIOLOGICAL ACTIVITY:

Nimorazole (K-1900), a 2-nitroimidazole, is a hypoxic cell-radiation sensitizer. Nimorazole has anti-infective and anti-protozoal activity against *trichomoniasis*. Nimorazole has the potential for head and neck cancer^{[1][2]}. IC50 & Target: Antiparasitic *In Vitro*: Nimorazole significantly improves the effect of radiotherapeutic management of supraglottic and pharynx tumors and can be given without major side-effects^{[1][2]}.

Nimorazole is the only such agent to have shown a significant effect in a randomized controlled trial in head and neck cancer^[3].

References:

- [1]. Overgaard, J., et al., A randomized double-blind phase III study of nimorazole as a hypoxic radiosensitizer of primary radiotherapy in supraglottic larynx and pharynx carcinoma. Results of the Danish Head and Neck Cancer Study (DAHANCA) Protocol 5-85. *Radiother Oncol*, 1998. 46(2): p. 135-46.
- [2]. Roy, R.B., S.M. Laird, and L. Heasman, Treatment of trichomoniasis in the female. A comparison of metronidazole and nimorazole. *Br J Vener Dis*, 1975. 51(4): p. 281-4.
- [3]. Henk, J.M., K. Bishop, and S.F. Shepherd, Treatment of head and neck cancer with CHART and nimorazole: phase II study. *Radiother Oncol*, 2003. 66(1): p. 65-70.
- [4]. Peter Wardman, et al. Nitroimidazoles as hypoxic cell radiosensitizers and hypoxia probes: misonidazole, myths and mistakes. *Br J Radiol*. 2019 Jan;92(1093):20170915.
- [5]. Zohreh Fakhrieh Kashan, et al. Therapeutic effects of Iranian herbal extracts against *Trichomonas vaginalis*. *Iran Biomed J*. 2017 Sep;21(5):285-93.

CAIndexNames:

Morpholine, 4-[2-(5-nitro-1H-imidazol-1-yl)ethyl]-

SMILES:

O=[N+](C1=CN=CN1CCN2CCOCC2)[O-]

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA