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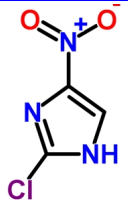

IDNUMBER	**ST029401**
CAS	57531-37-0
MDL NUMBER	MFCD03419295
Molecular formula	C3H2ClN3O2
Molecular weight	147.52
Purity	97%
Selling terms	Not for personal use, R&D use only.
IUPAC	2-chloro-4-nitroimidazole
Smiles	c1(c[nH]c(n1)Cl)[N+]([O-])=O
THERAPEUTIC CATEGORY	anti amoebic
ACCEPTORS	2
DONORS	1
ROTATION BONDS	0
N+O	5
Chiral Centers	0
LogP	0.49
LogS	-2.48
LIPINSKI	4
Synonyms	TIMTEC-BB SBB000100;1H-IMIDAZOLE, 2-CHLORO-4-NITRO-;2-CHLOR

2-Chloro-4-nitro Imidazole is available from stock in g/mg amounts.
Purchase 2-Chloro-4-nitro Imidazole
Please contact us for manufacturing large (kg) amounts.

Product Categories:NITRO;Halides;Imidazoles & Benzimidazoles;API intermediates;Imidazoles & Benzimidazoles 2-Chloro-4-nitroimidazole

Xi Risk Statements 36/37/38 Safety Statements 26-36 HazardClass IRRITANT

2-Chloro-4-nitroimidazole

References

Watras, J., Widel M., Suwinski J., Salwinska E. 2-Chloro-4-nitroimidazole radiosensitizers of hypoxic tumor cells in vivo. Journal Neoplasma. 1987;34(3):253-9.

Abstract

The transplantable rhabdomyosarcoma in WAG/Rij rats was used to test the in vivo effectiveness of 1-methyl-2-chloro-4-nitroimidazole (P13) and its analog 1-(2-hydroxy-3-methoxy-propyl)-2-chloro-4-nitroimidazole (P40) as tumor-cell radiosensitizers after their i.p. administration at low doses. The results indicate that both compounds administered repeatedly at nontoxic concentrations (70-150 mg/kg body wt.) in combination with moderate fractional doses of irradiation (3.7 Gy) enhance the radiation effect on tumors. The local control of tumors on the 210th day in all experimental groups has been higher than in the control ones. In the case of P40 administered in the maximal dose, the increment in local control is statistically significant (p less than 0.05). The regrowth delay has also been longer after treatment with radiosensitizers. In the course of treatment we did not observe any symptoms of neurotoxicity of the compounds. The mean body weight of rats during the administration of compounds remained on the level of control rats whose tumors were irradiated only.