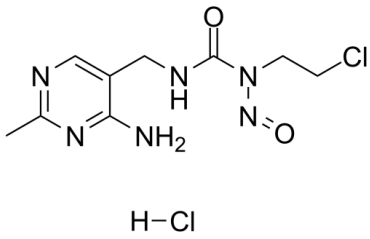
Data Sheet

Product Name:	Nimustine (hydrochloride)
Cat. No.:	CS-0007733
CAS No.:	55661-38-6
Molecular Formula:	C9H14Cl2N6O2
Molecular Weight:	309.15
Target:	Apoptosis; DNA/RNA Synthesis
Pathway:	Apoptosis; Cell Cycle/DNA Damage
Solubility:	DMSO : 62.5 mg/mL (202.17 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Nimustine hydrochloride (ACNU) is a DNA cross-linking and DNA alkylating agent, which induces DNA replication blocking lesions and DNA double-strand breaks and inhibits **DNA synthesis**, commonly used in chemotherapy for glioblastomas[1][2][3].

References:

[1]. Tomicic MT, et al. Apoptosis induced by temozolomide and nimustine in glioblastoma cells is supported by JNK/c-Jun-mediated induction of the BH3-only protein BIM. Oncotarget. 2015 Oct 20;6(32):33755-68.

[2]. Kondo N, et al. FANCD1/BRCA2 plays predominant role in the repair of DNA damage induced by ACNU or TMZ. PLoS One. 2011 May 9;6(5):e19659.

[3]. Mineura K, et al. DNA lability induced by nimustine and ramustine in rat glioma cells. J Neurol Neurosurg Psychiatry. 1988 Nov;51(11):1391-4.

CAIndexNames:

Urea, N'-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-N-(2-chloroethyl)-N-nitroso-, hydrochloride (1:1)

SMILES:

O=C(NCC1=CN=C(C)N=C1N)N(CCCl)N=O.[H]Cl

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