

[Open Peer Review on Qeios](#)

Diazooxonorleucine

National Cancer Institute

Source

National Cancer Institute. *Diazooxonorleucine*. NCI Thesaurus. Code C427.

An L-glutamine diazo analogue amino acid antibiotic isolated from a species of the bacterial genus *Streptomyces* with potential antineoplastic activity. Diazooxonorleucine inhibits several glutamine-dependent biosynthetic pathways involved in the syntheses of D-glucosamine phosphate, purines and pyrimidines. This agent inhibits phosphate-activated glutaminase, a key enzyme for the synthesis of releasable glutamine, depleting cells of this essential amino acid and reducing their capacity to proliferate.