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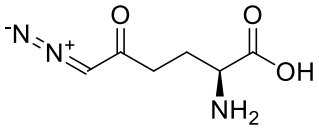
PRODUCT DATA SHEET

6-Diazo-5-oxo-L-norleucine

Code No.: **BIA-D2480**

Pack sizes: **0.25 mg, 1 mg**



Synonyms : L-6-Diazo-5-oxonorleucine, L-DON, NSC 7365

Specifications

CAS #	:	**157-03-9**
Molecular Formula	:	**$C_6H_9N_3O_3$**
Molecular Weight	:	**171.15**
Source	:	***Streptomyces* sp.**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

6-Diazo-5-oxo-L-norleucine is a glutamine antagonist originally isolated from Streptomyces sp. 6-Diazo-5-oxo-L-norleucine has antitumor activity, disrupting the mitochondrial internal membrane structures of the neuroendocrine tumour cell line BON and causing DNA single-strand breaks. 6-Diazo-5-oxo-L-norleucine acts synergistically with L-asparaginase to inhibit U251, U87, and SF767 glioblastoma cells.

References

1. 6-Diazo-5-oxo-L-norleucine, a new tumor inhibitory substance. II: Isolation and characterization. Dion H.W. et al. 1954 Antibiot Chemother. 1954, 78, 3075.
2. A mechanism behind the antitumour effect of 6-diazo-5-oxo-L-norleucine (DON): disruption of mitochondria. Wu F. et al. Eur J Cancer 1999, 35, 1155.
3. DNA strand cleavage by tumor-inhibiting antibiotic 6-diazo-5-oxo-L-norleucine. Hiramoto K. et al. Mutat Res. 1996, 360, 95.
4. L-asparaginase and 6-diazo-5-oxo-L-norleucine synergistically inhibit the growth of glioblastoma cells. Ohba S. and Yuichi H. J Neurooncol. 2020, 146, 469.

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