

# Streptozocin

Catalog No: tcsc1828



## Available Sizes

**Size:** 100mg

**Size:** 500mg



## Specifications

**CAS No:**

18883-66-4

**Formula:**

$C_8H_{15}N_3O_7$

**Pathway:**

Cell Cycle/DNA Damage;Cell Cycle/DNA Damage

**Target:**

DNA Alkylator/Crosslinker;DNA/RNA Synthesis

**Purity / Grade:**

>98%

**Solubility:**

H2O : 113.3 mg/mL (427.19 mM; Need ultrasonic and warming); DMSO :  $\geq$  30 mg/mL (113.11 mM)

**Storage Instruction:**

4°C

**Alternative Names:**

Streptozotocin;U 9889

**Observed Molecular Weight:**

265.22

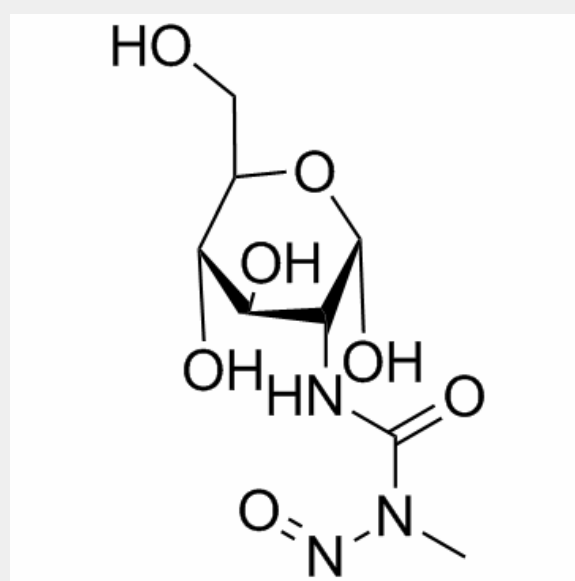
## Product Description

Streptozocin is a potent **DNA-methylating** agent, with **IC<sub>50</sub>** values of 11.7, 904 and 1024 µg/mL for HL60, K562 and C1498 cells respectively.

IC50 & Target: DNA alkylator<sup>[1]</sup>

**In Vitro:** Streptozocin (STZ) shows higher cytotoxic effect in vitro on hematological cell lines compared to Alloxan (ALX). ALX appears not to be toxic for the studied cell lines with estimated IC<sub>50</sub> values of 2809, 3679 or over 4000 µg/mL for HL60, K562 and C1498 cells, respectively. Streptozocin is more toxic, especially for the human myeloid leukemia cell line, HL60. The IC<sub>50</sub> values of Streptozocin are 11.7, 904 and 1024 µg/mL for HL60, K562 and C1498 cells, respectively. Results also show that the murine leukemic cells are more resistant to Streptozocin and ALX cytotoxicity than human leukemic cells<sup>[2]</sup>.

**In Vivo:** Streptozocin (STZ)-injected mice show tendency to have lower body weight than that observed in animals injected with ALX. Streptozocin -injected mice have significantly fewer splenocytes ( $22.2 \pm 3.2 \times 10^6$ ; n=10) compared to mice injected with ALX ( $60.7 \pm 4.3 \times 10^6$ ; n=15; p=0.01)<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!