

Product Name:	Streptozocin
Product Number:	S009
CAS Number:	18883-66-4
Molecular Formula:	$C_8H_{15}N_3O_7$
Molecular Weight:	265.22
Form:	Powder
Appearance:	Pale yellow crystalline powder
Source:	<i>Streptomyces achromogenes</i>
Water Content (Karl Fischer):	≤1.0%
Optical Rotation:	+39°
Storage Conditions:	-20°C
Description:	Streptozocin is a last resort anti-tumor agent commonly used to treat metastatic cancer of pancreatic islet cells. Streptozocin is freely soluble in aqueous solution (>100 mg/mL).
Mechanism of Action:	Streptozocin acts as an alkylating agent which damages DNA by adding methyl and other alkyl groups which interfere with normal base pairing.
Cancer Applications	Streptozocin has shown to decrease tumor size and relevant tumor-induced symptoms including hypoglycemia.
References:	<p>Murray-Lyon IM, Eddleston AL, Williams R, Brown M, Hogbin BM, Bennett A, Edwards JC, Taylor KW (1968). "Treatment of multiple-hormone-producing malignant islet-cell tumour with streptozotocin". <i>Lancet</i> 2 (7574): 895–8.</p> <p>Broder LE, Carter SK. Pancreatic islet cell carcinoma. II. Results of therapy with streptozotocin in 52 patients . <i>Ann Intern Med</i> 1973;79:108–18.</p> <p>Moertel CG, Hanley JA, Johnson LA. Streptozocin alone compared with streptozocin plus fluorouracil in the treatment of advanced islet-cell carcinoma . <i>N Engl J Med</i> 1980;303:1189–94.</p>