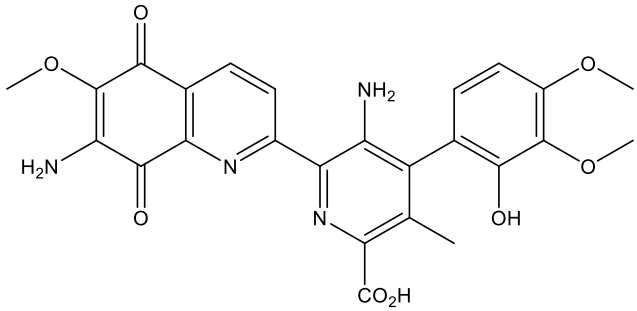
Catalog # 10-3484

Streptonigrin

CAS# 3930-19-6

Fermenation product from *Streptomyces flocculus*; Bruneomycin; NSC-45383

Lot # X109271



Streptonigrin promotes heterochromatin formation at concentrations as low as 1 nM, a concentration at which there was no effect on proliferation or viability.[1] Inhibits the SUMO-specific protease SENP1 resulting in increased global SUMOylation levels and reduced level of HIF1α.[2] Stabilizes p53 via inhibition of transglutaminase 2 resulting in p53-mediated apoptosis in renal cell carcinoma cells.[3] Cytotoxic to fast-cycling melanoma cells but leaves a small population of slow-dividing cells unaffected and may be considered a tool to enrich cultures with cells exhibiting melanoma stem cell characteristics.[4]

1) Loyola *et al*. (2020), *Streptonigrin at low concentrations promotes heterochromatin formation*; Sci. Rep. **10** 3478

2) Ambaye *et al*. (2018), *Streptonigrin Inhibits SENP1 and Reduces the Protein Level of Hypoxia-Inducible Factor 1α (HIF1α) in Cells*; Biochemistry **57** 1807

3) Lee *et al*. (2018), *Renal Cell Carcinoma is Abrogated by p53 Stabilization through Transglutaminase 2 Inhibition*; Cancers (Basel) **10** 455

4) Sztiller-Sikorska *et al*. (2014), *Natural compounds' activity against cancer stem0like or fast-cycling melanoma cells*; PLoS One **9** e90783

PHYSICAL DATA

Molecular Weight:	506.47
Molecular Formula:	$C_{25}H_{22}N_4O_8$
Purity:	>95% by HPLC
	NMR: (Conforms)
Solubility:	DMSO
Physical Description:	Black solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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