

Product Name:	Kigamicin C
Product Number:	K023
CAS Number:	680571-51-1
Molecular Formula:	$C_{41}H_{47}NO_{16}$
Molecular Weight:	809.8
Appearance:	Pale yellow powder
Storage Conditions:	-20°C
Description:	<p>Kigamicin C was discovered by an anti-austerity strategy, targeting cancer cells' tolerance to starvation. It selectively kills PANC-1 cells (a pancreatic cell line) at concentrations 100 times lower under nutrient starved conditions than in normal conditions. It is active in vivo against a human pancreatic cancer xenograft model. Kigamicin C also inhibits the growth of Gram positive bacteria including MRSA, but is not active against Gram negative bacteria.</p> <p>Kigamicin C is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</p>
Mechanism of Action:	The mechanism of action is proposed to be via blockade of aPKB/Akt activation, caused by the withdrawal of nutrients.
References:	<p>Kigamicin D, a novel anticancer agent based on a new anti-austerity strategy targeting cancer cells' tolerance to nutrient starvation. Lu J. et al. Cancer Sci. 2004, 95, 547.</p> <p>Kigamicins, novel antitumor antibiotics. II. Structure determination. Kunimoto S. et al. J. Antibiot. 2003, 56, 1012.</p> <p>Kigamicins, novel antitumor antibiotics. I. Taxonomy, isolation, physico-chemical properties and biological activities. Kunimoto S. et al. J. Antibiot. 2003, 56, 1004.</p>