

Product Name: Valinomycin

Product Number: V015

CAS Number: 2001-95-8

Molecular Formula: $C_{54}H_{90}N_6O_{18}$

Molecular Weight: 1111.3

Appearance: White powder

Storage Conditions: -20°C

Description: Valinomycin is a hydrophobic cyclodepsipeptide with potent antitumor activity. Valinomycin is a highly selective potassium ionophore and this action leads to a diverse range of profound cell membrane effects. More recently, valinomycin has found application as a biosensor to detect potassium efflux.

Valinomycin is soluble in ethanol, methanol, DMF and DMSO.

References: K⁺-selective nanospheres: maximising response range and minimising response time. Ruedas-Rama M.J. & Hall E.A. *Analyst*. 2006, 131, 1282.

Potentiometric combination ion/carbon dioxide sensors for in vitro and in vivo blood measurements. Collison M.E. et al. *Anal Chem*. 1989, 61, 2365.