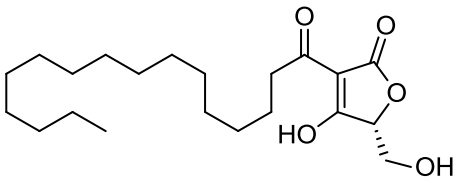
bioaustralis
fine chemicals

PRODUCT DATA SHEET

TAN 1364B

Code No.: **BIA-T1544**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : CI 010, 3-hexadecanoyl-5-hydroxymethyltetronic acid.

Specifications

CAS #	:	**154639-24-4**
Molecular Formula	:	**$C_{21}H_{36}O_5$**
Molecular Weight	:	**368.5**
Source	:	***Streptomyces* sp.**
Appearance	:	**White Solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.**

Application Notes

TAN 1364B is the most abundant analogue of a tetronic acid complex isolated from Streptomyces species, first patented by Takeda in 1993 and more formally identified by Ciba Geigy as the sodium salt of 3-hexadecanoyl-5-hydroxymethyltetronic acid. In 1995 researchers at RIKEN reported the isolation of 3-hexadecanoyl-5-hydroxymethyltetronic acid, named as RK-682. Subsequent synthesis in 2001 showed that the RIKEN RK-682 was in fact the calcium complex of TAN 1364B formed as an artefact during silica chromatography. As the complex, salt or free acid, TAN 1364B inhibits protein tyrosine phosphatases, phospoholipase A2, heparinase and HIV-1 protease. However, it is unclear whether biological activity is due to the monomer (TAN 1364B) or dimeric complex (RK-682)

References

1. Tetronic acid derivative, its production and use. Susumu S. et al. Japan Patent 5043568 1993.
2. Asymmetric synthesis of a 3-acyltetronic acid derivative, RK-682, and formation of its calcium salt during silica gel column chromatography. Sodeoka M. et al. Chem. Pharm. Bull. 2001, 49, 206.
3. 3-Alkanoyl-5-hydroxymethyl tetronic acid homologues and resistomycin: new inhibitors of HIV-1 protease. I. Fermentation, isolation and biological activity. Roggo B.E. J. Antibiot. 1994, 47, 136.

Updated: 2 December 2014

Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com