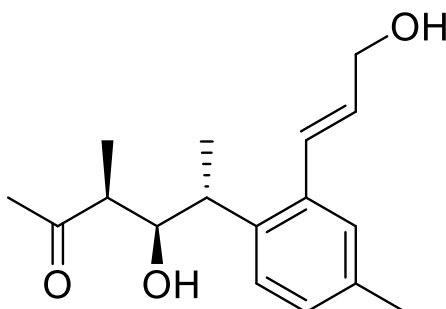


NFAT-133

Code No.: **BIA-N2947**

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



Synonyms : NFAT 133

Specifications

CAS #	: 165133-85-7
Molecular Formula	: C ₁₇ H ₂₄ O ₃
Molecular Weight	: 276.4
Source	: <i>Streptomyces</i> sp.
Appearance	: Tan residue
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

NFAT-133 is an aromatic polyketide produced by *Streptomyces* sp.. NFAT-133 induces glucose uptake in differentiated L6 myotubes without activating the peroxisome proliferator-activated receptor- γ with an EC₅₀ of $6.3 \pm 1.8 \mu\text{M}$. NFAT-133 inhibits transcription mediated by nuclear factor of activated T cells (NFAT), leading to the suppression of interleukin-2 expression and T cell proliferation.

References

1. Simple aromatics identified with a NFAT-lacZ transcription assay for the detection of immunosuppressants. Burres N.S. et al. J Antibiot 1995, 48, 380.
2. Fermentation, isolation, structure, and antidiabetic activity of NFAT-133 produced by *Streptomyces* strain PM0324667. Kulkarni-Almeida A.A. et al. AMB Express 2011, 1, 42.
3. Absolute configuration of NFAT-133, an aromatic polyketide with immunosuppressive and antidiabetic activity from actinomycetes. Yang Y. et al. J. Antibiot. 2016, 69, 69.
4. Biosynthesis of the nuclear factor of activated T cells inhibitor NFAT-133 in *Streptomyces pactum*. Zhou W. et al. ACS Chem. Biol. 2020, 15, 12, 3217.