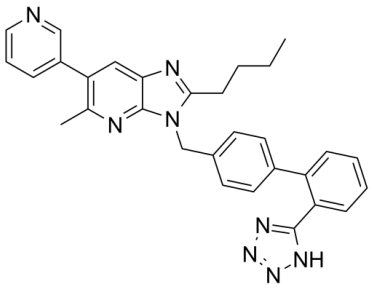
Data Sheet

Product Name:	TM-25659
Cat. No.:	CS-0069266
CAS No.:	260553-97-7
Molecular Formula:	C30H28N8
Molecular Weight:	500.60
Target:	Others
Pathway:	Others
Solubility:	H2O : < 0.1 mg/mL (insoluble); DMSO : ≥ 135 mg/mL (269.68 mM)



BIOLOGICAL ACTIVITY:

TM-25659 is a **transcriptional co-activator with PDZ-binding motif (TAZ)** modulator. Anti-osteoporotic and anti-obesity activities[1]. IC50 & Target: TAZ[1] **In Vitro:** TM-25659 (2, 10, 20, 100 μM) enhances nuclear TAZ localization in a dose-dependent manner and attenuates PPARγ-mediated adipocyte differentiation by facilitating PPARγ suppression activity of TAZ[1].

TM-25659 (2, 10, 50 μM) enhances osteogenic gene expression and thereby increases osteoblast differentiation[1].

In Vivo: TM-25659 (50 mg/kg, i.p., every other day for 2 weeks) suppresses bone loss in vivo and decreases weight gain in an obesity model[1].

TM-25659 has a favourable pharmacokinetic profile in rats. The plasma concentration of TM-25659 declines with an approximate $t_{1/2}$ of 7 or 10 h following i.v or p.o. administration respectively. The systemic clearance (CL) is 0.21 $L \times h^{-1} \times kg^{-1}$ and the volume of distribution at steady-state (1.91 $L \times h^{-1} \times kg^{-1}$) is larger than the volume of total body fluids[1].

References:

[1]. Jang EJ, et al. TM-25659 enhances osteogenic differentiation and suppresses adipogenic differentiation by modulating the transcriptional co-activator TAZ. Br J Pharmacol. 2012 Mar;165(5):1584-94.

CAIndexNames:

3H-Imidazo[4,5-b]pyridine, 2-butyl-5-methyl-6-(3-pyridinyl)-3-[[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-

SMILES:

CC1=C(C2=CC=CN=C2)C=C3C(N(CC4=CC=C(C5=CC=CC=C5C6=NN=NN6)C=C4)C(CCCC)=N3)=N1

Caution: Product has not been fully validated for medical applications. For research use only.

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