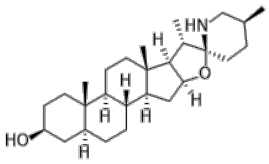
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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Tomatidine
Cat. No.	:	PC-28763
CAS No.	:	77-59-8
Molecular Formula	:	$C_{27}H_{45}NO_2$
Molecular Weight	:	415.66
Target	:	mTOR
Solubility	:	10 mM in DMSO



Biological Activity

Tomatidine is a steroidal alkaloid derived from green tomatoes, stimulates mTORC1 signaling and anabolism, leading to accumulation of protein and mitochondria, and cell growth, inhibits ATF4 activity in aged skeletal muscle.
Tomatidine increased skeletal muscle mTORC1 signaling, reduced skeletal muscle atrophy, enhanced recovery from skeletal muscle atrophy, stimulated skeletal muscle hypertrophy, and increased strength and exercise capacity in mice.
Tomatidine specifically potentiated the inhibitory effect of aminoglycosides but not of other classes of drugs, against Staphylococcus aureus.
Tomatidine suppresses inflammation in primary articular chondrocytes and attenuates cartilage degradation in osteoarthritic rats.

References

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Ebert SM, et al. J Biol Chem. 2015 Oct 16;290(42):25497-511.

Chu X, et al. Aging (Albany NY). 2020 Jul 5;12(13):12799-12811.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com