



Barlerin

Cat. No.:	OB0225WX-1624
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR.
Size:	1 mg; 2 mg; 5 mg; 10 mg; 25 mg; 50 mg; 100 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Barlerin is an iridoid glycoside that modulates the HMGB1-dependent NF-κB signaling pathway and inhibits intracellular Ca²⁺ elevation and caspase-3 activation to maintain blood-brain barrier integrity.

Synonym

8-O-Acetylshanzhiside methyl ester; ND01; 57420-46-9; 8-O-Acetylshanzhiside methyl ester; Methyl (1S,4aS,5R,7S,7aS)-7-acetyloxy-5-hydroxy-7-methyl-1-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4a,5,6,7a-tetrahydro-1H-cyclopenta[c]pyran-4-carboxylate; 5β-Dihydro Finasteride; Cyclopenta[c]pyran-4-carboxylic acid, 7-(acetyloxy)-1-(β-D-glucopyranosyloxy)-1,4a,5,6,7,7a-hexahydro-5-hydroxy-7-methyl-, methyl ester, (1S,4aS,5R,7S,7aS)-; MFCD15071141; 8-O-Acetylshanzhisidemethylester; (4aR</i>,4bS,6aS,7S,9aS,9bS,11aS)-N-(1,1-Dimethylethyl)hexadecahydro-4a,6a-dimethyl-2-oxo-1H-indeno[5,4-f]quinoline-7-carboxamide; (5ss,17ss)-N-(1,1-dimethylethyl)-3-oxo-4-azaandrostane-17-carboxamide; [4aR-(4aa,4bss,6aa,7a,9ass,9ba,11aa)]-N-(1,1-Dimethylethyl)hexadecahydro-4a,6a-dimethyl-2-oxo-1H-indeno[5,4-f]quinoline-7-carboxamide; Cyclopenta(c)pyran-4-carboxylic acid, 7-(acetyloxy)-1-(β-D-glucopyranosyloxy)-1,4a,5,6,7,7a-hexahydro-5-hydroxy-7-methyl-, methyl ester, (1S-(1α,4α,5α,7α,7α))-; Methyl (1S,4aS,5R,7S,7aS)-7-acetoxy-5-hydroxy-7-methyl-1-(((2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-2-yl)oxy)-1,4a,5,6,7,7a-hexahydrocyclopenta[c]pyran-4-carboxylate

CAS No.	57420-46-9
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Compound CID	162823
Formula	C ₁₉ H ₂₈ O ₁₂
Formula Weight	448.42

Specification

Relative Density	1.52 g/cm ³
IUPAC Name	Methyl (1S,4aS,5R,7S,7aS)-7-acetyloxy-5-hydroxy-7-methyl-1-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4a,5,6,7a-tetrahydro-1H-cyclopenta[c]pyran-4-carboxylate
InChI	InChI=1S/C19H28O12/c1-7(21)31-19(2)4-9(22)11-8(16(26)27-3)6-28-17(12(11)19)30-18-15(25)14(24)13(23)10(5-20)29-18/h6,9-15,17-18,20,22-25H,4-5H2,1-3H3/t9-,10-,11+,12-,13-,14+,15-,17+,18+,19+/m1/s1
InChI Key	ARFRZOLTIRQFCI-NGQYDQZSA-N
SMILES string	CC(=O)O[C@]1(C[C@H]([C@H]2[C@@H]1[C@@H](OC=C2C(=O)OC)[C@H]3[C@@H]([C@H]([C@@H]([C@H](O3)CO)O)O)O)C
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	Barlerin is employed in phytochemical studies to examine its potential anti-inflammatory and antioxidant activities within the context of traditional medicinal plant research.

Library Information

Target	Akt; Caspase; NF-κB; VEGFR; TNF
Receptor	Akt; Caspase; NF-Kb; TNF-α; VEGFR
Pathways	Cytoskeletal signaling; Angiogenesis; NF-κB; Apoptosis; Proteases/Proteasome; PI 3K/Akt/mTOR signaling; Tyrosine kinase/adaptors
Plate Number	AOCL-21
Plate Location	g9
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	82 mg/mL; 182.9 mM