

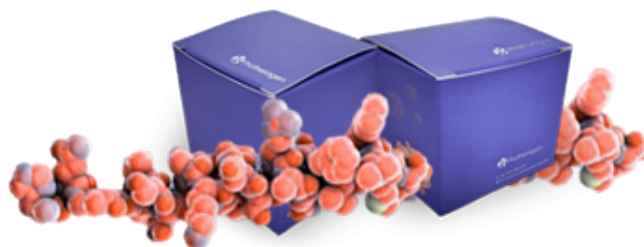
Ginsenoside Rb1

Cat. No.:	OB0225WX-2572
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and HPLC.
Size:	5 mg; 25 mg; 50 mg; 100 mg

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

Product Overview

Description	Ginsenoside Rb1 is a protopanaxadiol constituent of <i>Panax ginseng</i> that inhibits Na^+ , K^+ -ATPase activity (IC_{50} : 6.3 μM) and suppresses the activation of IRAK-1 and NF-kappaB p65.
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Synonym	Gypenoside III; 41753-43-9; Ginsenoside rb1; Gynosaponin C; Sanchinoside E1; Arasa ponin E1; Panax saponin E; Pseudoginsenoside D; ginsenoside-Rb1; Panaxsaponin E; Panaxoside Rb1; Sanchinoside Rb1; Notoginsenoside Rb1; GS-Rb1; (20S)-gin senoside Rb1; MFCD00133367; 20(S)-ginsenoside Rb1; 2-O-beta-Glucop yranosyl-(3beta,12beta)-20-[(6-O-beta-D-glucopyranosyl-beta-D-glucopyrano syl)oxy]-12-hydroxydammar-24-en-3-yl beta-D-glucopyranoside; GinsenosideRb1; 2-< i>O-beta-Glucopyranosyl-(3beta,12beta)-20-((6-O-beta-D-glucopyranosyl -beta-D-glucopyranosyl)oxy)-12-hydroxydammar-24-en-3-yl-beta-D-glucopyranoside; beta-D-Glucopyranoside, (3-beta,12-beta)-20-((6-O-beta-D-glucopyranosyl-b eta-D-glucopyranosyl)oxy)-12-hydroxydammar-24-en-3-yl 2-O-beta-D-glucopyr anosyl-; (3beta,12beta)-20-((6-O-(beta-D-glucopyranosyl)-beta-D-glucopyra nosyl)oxy)-12-hydroxydammar-24-en-3-yl 2-O-beta-D-glucopyranosyl-beta-D-g lucopyranoside; (3beta,12beta)-20-((6-O-beta-D-glucopyranosyl-beta-D-gluc opyranosyl)oxy)-12-hydroxydammar-24-en-3-yl 2-O-beta-D-glucopyranosyl-bet a-D-glucopyranoside; (3beta,12beta)-20-[(6-O-beta-D-glucopyranosyl-beta-D -glucopyranosyl)oxy]-12-hydroxydammar-24-en-3-yl 2-O-beta-D-glucopyranosyl l-beta-D-glucopyranoside; (3beta,12beta)-20-[(6-O-(beta-D-glucopyranosyl) -beta-D-glucopyranosyl]oxy}-12-hydroxydammar-24-en-3-yl 2-O-beta-D-glucop yranosyl-beta-D-glucopyranoside; 3beta-(beta-D-glucopyranosyl-(1->2)-beta-D glucopyranosyloxy)-20-(beta-D-glucopyranosyl-(1->2)-beta-D glucopyranosyloxy)dammar- 24-en-12beta-ol; 3beta-[beta-D-glucopyranosyl-(1->2)-beta-D glucopyranosyloxy]-2 0-[beta-D-glucopyranosyl-(1->2)-beta-D glucopyranosyloxy]dammar-24-en-12beta-ol
CAS No.	41753-43-9
Compound CID	9898279
Formula	C ₅₄ H ₉₂ O ₂₃
Formula Weight	1109.29

Specification

IUPAC Name	(2R,3R,4S,5S,6R)-2-[[[(2R,3S,4S,5R,6S)-6-[(2S)-2-[(3S,5R,8R,9R,10R,12R,13R,14R,17S)-3-[(2R,3R,4S,5S,6R)-4,5-Dihydroxy-6-(hydroxymethyl)-3-[(2S< /i>,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxyoxan-2-yl]oxy-12-hydroxy-4,4,8,10,14-pentamethyl-2,3,5,6,7,9,11,12,13,15,16,17-dodecahydro-1H-cyclopenta[a]phenanthren-17-yl]-6-methylhept-5-en-2-yl]oxy-3,4,5-trihydroxyoxan-2-yl]methoxy]-6-(hydroxymethyl)oxane-3,4,5-trio l
InChI	InChI=1S/C54H92O23/c1-23(2)10-9-14-54(8,77-48-44(69)40(65)37(62)29(74-48)22-70-4 6-42(67)38(63)34(59)26(19-55)71-46)24-11-16-53(7)33(24)25(58)18-31-51(5)15-13-32 (50(3,4)30(51)12-17-52(31,53)6)75-49-45(41(66)36(61)28(21-57)73-49)76-47-43(68)3 9(64)35(60)27(20-56)72-47/h10,24-49,55-69H,9,11-22H2,1-8H3/t24-,25+,26+,27+,28+, 29+,30-,31+,32-,33-,34+,35+,36+,37+,38-,39-,40-,41-,42+,43+,44+,45+,46+,47-,48-, 49-,51-,52+,53+,54-/m0/s1
InChI Key	GZYPWOGIYAIPV-JBDTYSNRSA-N
SMILES string	CC(=CCC[C@@](C)([C@H]1CC[C@@]2([C@@H]1[C@@H](C[C@H]3[C@]2(CC[C@@H]4[C@@]3(CC[C@@H](C4(C)C)O[C@H]5[C@@H]([C@H]([C@@H]([C@H](O5)CO)O)O)[C@H]6[C@@H]([C@H]([C@H]([C@H](O6)CO)O)O)C)C)O)[C@H]7[C@@H]([C@H]([C@@H]([C@H](O7)CO[C@H]8[C@@H]([C@H]([C@@H]([C@H](O8)CO)O)O)O)O)O)O)C
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	Ginsenoside Rb1 is used in cardiovascular and metabolic research to study its protective effects on the myocardium and its ability to regulate obesity-related inflammatory markers and lipid accumulation.

Library Information

Target	ATPase; IFN; IRAK; NF-κB; NOS; TLR; TNF-alpha
Receptor	ATPase; IFN; IRAK; NF-κB; NOS; TLR; TNF-alpha
Pathways	Transmembrane transporters
Plate Number	L6700-05
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	100 mg/mL; 90.15 mM
Water Max Solubility	100 mg/mL
ALogP	-1.198
HBA_Count	8
HBD_Count	15
Rotatable Bond	16