Traditionally, there are in major use chemical names having differences from the contemporary organic chemical nomenclature. We are giving available synonyms where the version following the best accordance with the nomenclature rules is used in bold, other trivial and CA names are normal.

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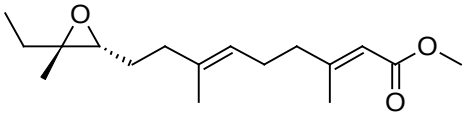
JUVENILE HORMONE(S)

S3312-001 (±)-Juvenile Hormone II

Methyl (2*E*,6*E*)-9-[(2*R,3*S**)-3-ethyl-3-methyloxiran-2-yl]-3,7-dimethylnona-2,6--dienoate**

Methyl (±)-(2*E*,6*E*,10*R**,11*S**)-10,11-Epoxy-3,7,11-trimethyl-2,6-tridecadi-enoate, Methyl (±)-10,11-*cis*-Epoxy-3,7,11-trimethyl-2E,6E-tridecadienoate, Methyl (±)-10,11-*cis*-Epoxy-3,7,11-trimethyl-2-*trans*,6-*trans*-tridecadienoate, *[2R-[2α(2E,6E),3α]]*-9-(3-ethyl-3-methyloxiranyl)-3,7-dimethyl-2,6-nonadienoic acid methyl ester

(±)-JHII, **(±)-Juvenile Hormone II**, purity ca. 78% (GC, NMR), $C_{17}H_{28}O_3$, FW 280.4, bp (bath) 85°C (0,035mm), synthetic, *[34218-61-6],* MOISTURE SENSITIVE, STORE AT -18°C (Packaged under argon in glass vials)



Literature: Anderson R.J., et al.: J. Amer. Chem. Soc. 94, 5379 (1972) prepn of; Röller Het al.: Angew. Chem., Int. Ed. Engl. 6, 179 (1967); Meyer A.Set al.: Proc. Nat. Acad. Sci. U.S.A. 60, 853 (1968); Trost B.M.: Accounts Chem. Res. 3, 120 (1970) isolation, identification, spectra, biological properties.

Other JHs are no more available.

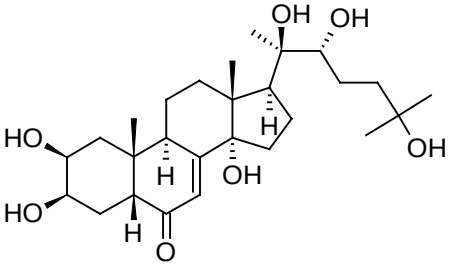
ECDYSONES

Ecdysones scientific hotline: http://ecdybase.org/

S3314-001 20-Hydroxyecdysone

(20*R*,22*R*)-2β,3β,14,20,22,25-Hexahydroxy-5β-cholest-7-en-6-one

β-Ecdysone, Ecdysterone, Crustecdysterol, (2β,3β,5β,22R)-2,3,14,20,22,25-Hexahydroxy-cholest-7-en-6-one. Purity ca. 99%, natural, suitable for bioassays and immunoassays building block preparation, $C_{27}H_{44}O_7$, FW 480.6, mp 241-243°C, [Lafont, Wilson 1992, p. 205] [Sigma H5142] *[5289-74-7]*



Function: Insect molting hormone. *Occurrence:* Invertebrates, arthropod phylum, insects crustaceans, spiders, ticks, plants, fungi. *Application:* medicine - silkworm production regulation, helminthal parasites identification, cosmetics and dermatology (effect on human epidermal kerationcytes), suspect anabolic.

Literature: Ecdysone. From Chemistry to Mode of Action. J. Koolman (Ed.), G.Thieme Verlag Stuttgart - New York, 1989; Eur J. Dermatol 4, 558 (1994); Patent WO 94/04132 (03.03.1994).

S3314-095 20-Hydroxyecdysone 95

purity ca. 95%, natural from *Leuzea carthamoides*, suitable for chemical transformations and for use in cosmetic research, where minor ecdysteroid admixtures of polypodine B, ajugasterone C, inokosterone have no negative effect (no drug or cosmetic registration issued).

Structure as 20-Hydroxyecdysone; no mp given; quantitative HPLC analysis issued with each batch.

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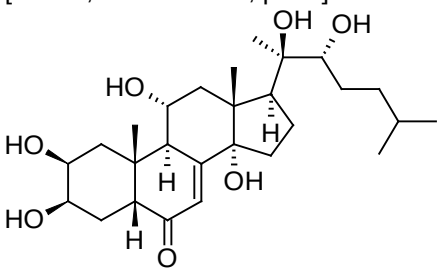
S3330-001 Ajugasterone C,

(20*R*,22*R*)-2β,3β,11,14,20,22-Hexahydroxy-5β-cholest-7-en-6-one

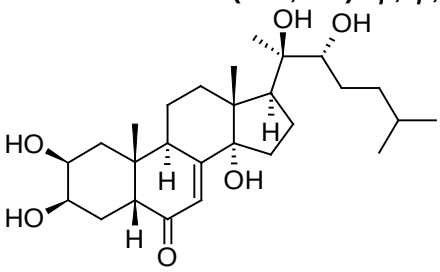
(2β,3β,5β,22R)-2,3,11,14,20,22-Hexahydroxy-cholest-7-en-6-one. Purity ca. 97+%, natural, suitable for bioassays and immunoassays building block preparation, $C_{27}H_{44}O_7$, FW 480.6, mp not reported, [Lafont, Wilson 1992, p. 18]



Function: Ecdysone agonist. *Activity:* Sarcophaga bioassay. *Occurrence:* Animals (Anthozoa), plants. *Application:* not reported, suspect anabolic.
Literature: Imai S., Murata E., Fujioka S, J.Chem. Soc. Chem. Commun., 546-547 (1969), Isolation; Bielby C.R. et al. J.Chromatogr. **351**, 57-64 (1986), GC; Píš J. et al., Phytochemistry **37**, 707-711 (1994), HPLC NMR; Harmatha J. and Dinan L., Arch. Insect Biochem. Physiol. **35**, 219-225 (1997).

S3331-001 Ponasterone A

(20*R*,22*R*)-2β,3β,14,20,22-Pentahydroxy-5β-cholest-7-en-6-one



(2β,3β,5β,22R)-2,3,14,20,22-Pentahydroxy-cholest-7-en-6-one. Purity 95 %+, natural. $C_{27}H_{44}O_6$, FW 464, M.P. 259-260°C (decomp.), $[\alpha]_D^{20}$ not reported, IR (KBr) ν max (cm-1) 3420 (OH), 1643 (CO), UV (MeOH) λ max (log ε) 244 (4.093), 326 (2.11). Ecdybase. *Occurrence*: in plants Taxus cuspidata, various Ferns, Tapinella panuoides, in animals: Gecarcinus lateralis, Callinectes sapidus, Carcinus maenas.

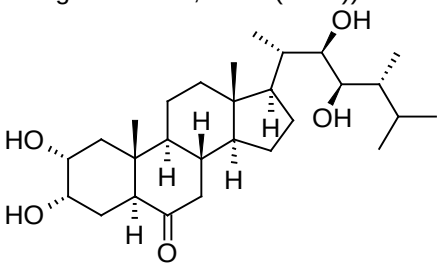
Literature: Nakaniski K. et al. J. Chem. Soc., Chem. Commun., (1966) 915-917, McCarthy, J.F. et al. Steroids 34, 799-806 (1979).

BRASSINOSTEROIDS

S3315-001 EPICASTASTERONE

(22*R*,23*R*)-2α,3α,22,23-Tetrahydroxy-5α-ergostan-6-one

24R-Castasterone, (2α,3α,5α,22R,23R,24R)- 2,3,22,23-Tetrahydroxy-ergostan-6-one
purity >95%, synthetic, $C_{28}H_{48}O_5$, FW 464.7, mp 247-249°C (mp lit 241-242°C, Thompson M.J., et al. J.Org.Chem. 44, 5002 (1979)).



Literature: Synthesis: Thompson M.J., et al.: J.Org.Chem. 44, 5002 (1979); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379; Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Identification (*Hydrodyction Reticulatum*) Yokota T., et al.: Phytochemistry 26, 503 (1987). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983)

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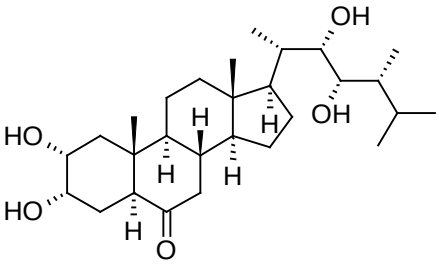
S3318-001 22*S*,23*S*-EPICASTASTERONE

(22*S*,23*S*)-2α,3α,22,23-Tetrahydroxy-5α-ergostan-6-one

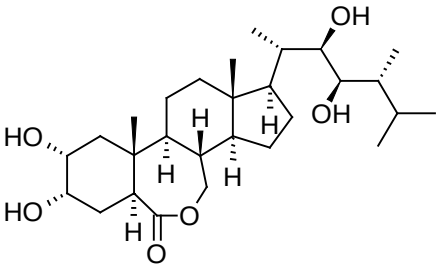


22S,23S,24R-Castasterone, (2α,3α,5α,22S,23S,24R)-2,3,22,23-Tetrahydroxy-ergostan-6-one, purity >95%, synthetic, $C_{28}H_{48}O_5$ FW 464.7, mp 183-185°C (mp lit 184-185°C); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379).

Literature: Synthesis: Thompson M.J., et al.: J.Org.Chem. 44, 5002 (1979); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379; Takatsuto S., et al. Chem. Pharm. Bull. 32, 2001 (1984) ; Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983).

S3316-001 EPIBRASSINOLIDE

(22*R*,23*R*)-2α,3α,22,23-Tetrahydroxy-7-oxa-B-homo-5α-ergostan-6-one

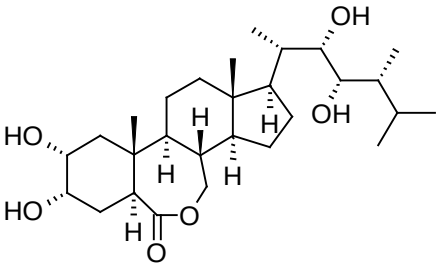


24R-Brassinolide, Epibrassinolide R, (2α,3α,5α,22R,23R)-2,3,22,23-Tetrahydroxy-B-homo-7-oxa-ergostan-6-one, purity >95%, synthetic, $C_{28}H_{48}O_6$, FW 480.7, mp 256-258°C (mp lit 256-258°C, Thompson M.J., et al. J.Org.Chem. 44, 5002 (1979)); [Sigma E1641] *[78821-43-9].*

Literature: Synthesis: Thompson M.J., et al.: J.Org.Chem. 44, 5002 (1979); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379; Takatsuto S., et al. Chem. Pharm. Bull. 32, 2001 (1984) ; Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Identification (*Vicia Faba L.*) Ikekawa N., et. al. Chem. Pharm. Bull. 36, 405 (1988). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983). Practical Application: Ikekawa N. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 280 (1991).

S3317-001 22*S*,23*S*-EPIBRASSINOLIDE

(22*S*,23*S*)-2α,3α,22,23-Tetrahydroxy-7-oxa-B-homo-5α-ergostan-6-one



22S,23S,24R-Brassinolide, Epibrassinolide S, (2α,3α,5α,22S-,23S)-2,3,22,23-Tetrahydroxy-B-ho-mo-7-oxaergostan-6-one, purity >95%, synthetic, $C_{28}H_{48}O_6$, FW 480.7, mp 195-197°C (mp lit 193-195°C); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379), *[78821-42-8].*

Literature: Synthesis: Thompson M.J., et al.: J.Org.Chem. 44, 5002 (1979); Anastasia M. et al.: J.Chem.Soc. Perkin Trans I, 1983, 379; Takatsuto S., et al. Chem. Pharm. Bull. 32, 2001 (1984) ; Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983).

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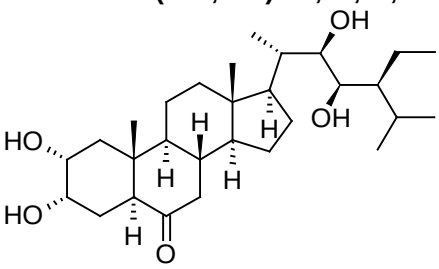
S3323-001 HOMOCASTASTERONE

(22S,23S)-2α,3α,22,23-Tetrahydroxy-6-oxa-5α-stigmastan-6-one

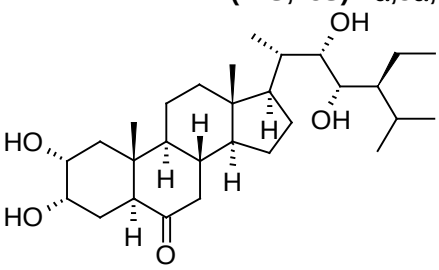


24S-Ethylbrassinon, (2α,3α,5α)-2,3,22,23-Tetrahydroxy-6-oxastigmastan-6-one, purity >95%, synthetic, $C_{29}H_{50}O_5$, FW 478.7, mp 253-256°C (mp lit 253-256°C Takatsuto S., et al. Chem. Pharm. Bull. 30, 4181 (1982), 243-244°C Thompson M.J., et al.: Steroids 39, 89 (1982)).

Literature: Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). AbeH. et al.: Experiencia 39, 351 (1983), Ikekawa N. et al.: J. Chromatogr. 290, 289 (1984), Takatsuto S., et al. Chem. Pharm. Bull. 30, 4181 (1982), Thompson M.J., et al.: Steroids 39, 89 (1982), Yokota T., et al.: Phytochemistry 26, 503 (1987).

S3319-001 22*S*,23*S*-HOMOCASTASTERONE

(22*S*,23*S*)-2α,3α,22,23-Tetrahydroxy-5α-stigmastan-6-one

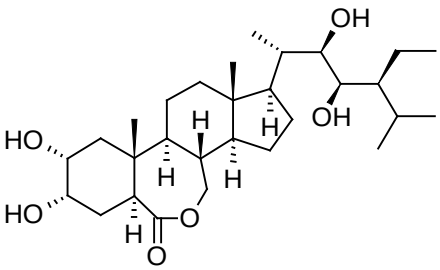


22S,23S,24S-Ethylbrassinone, (2α,3α,5α)-2,3,22,23-Tetrahydroxy-stigmastan-6-one, purity >95%, synthetic, $C_{29}H_{50}O_5$ FW 478.7, mp 208-210°C (mp lit 206-208°C; Mori K., et al.: Tetrahedron 38, 2099 (1982).
[83510-06-9]

Literature: Synthesis: Takatsuto S., et al. Chem. Pharm. Bull. 30, 4181 (1982) ; Sakakibara et. al.: Agric. Biol. Chem. 46, 2769 (1982), Takatsuto S., et al.: J.Chem.Soc, Perkin. Trans. I, 1984, 439. Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983).

S3324-001 HOMOBRASSINOLIDE

(22*R*,23*R*)-2α,3α,22,23-Tetrahydroxy-7-oxa-B-homo-5α-stigmastan-6-one



(2α,3α,5α)-2,3,22,23-Tetrahydroxy-B-homo-7-oxastigmastan-6-one, purity >95%, synthetic, $C_{29}H_{50}O_6$, FW 494.7, mp 269-271°C (mp lit 271-272°C Thompson M.J., et al.: Steroids 39, 89 (1982)). *[74174-44-0].*

Literature: Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Thompson M.J., et al.: Steroids 39, 89 (1982), 100.101
97.46 Sakakibara M. et al.: Agric. Biol. Chem. 46, 2769 (1982), Takatsuto S., et al.: J. Chem. Soc. Perkin I 1984, 439. Ikekawa N. et al.: J. Chromatogr. 290, 289 (1984).

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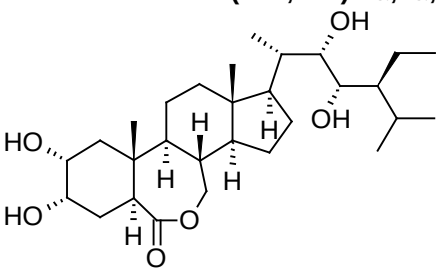
S3320-001 **22*S*,23*S*-HOMOBRASSINOLIDE**

(22*S*,23*S*)-2α,3α,22,23-Tetrahydroxy-7-oxa-B-homo-5α-stigmastan-6-one



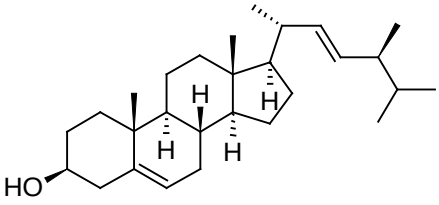
22S,23S,28-Methylbrassinolide, (2α,3α,5α)-2,3,22,23-Tetrahydroxy-B-homo-7-oxastig-mastan-6-one, purity >95%, synthetic, $C_{29}H_{50}O_6$, FW 494.7, mp 193-194°C (mp lit 193-194°C); Mori K., et al.: Tetrahedron 38, 2099 (1982). [Sigma H1267] *[110369-52-3].*

Literature: Synthesis:Takatsuto S., et al. Chem. Pharm. Bull. 30, 4181 (1982) ; Sakakibara et. al.: Agric. Biol. Chem. 46, 2769 (1982), Takatsuto S., et al.: J.Chem.Soc, Perkin. Trans. I, 1984, 439. Khripach V. et al.: Brassinosteroids: Chemistry, Bioactivity, and Applications, ACS Symp. Series, Washington, 474, 43 (1991). Biological Activity: Thompson M.J., et al.: Steroids 38, 567 (1981), and 39, 89 (1982), Takatsuto S., et al.: Phytochemistry 22, 1393 (1983) and 22, 2437 (1983). Thompson M.J., et.al.: J.Org.Chem. 44, 5002 (1979).

BRASSICASTEROIDS

S3321-001 **BRASSICASTEROL**

(22E)-Ergosta-5,22-dien-3β-ol



24-Methylcholest-5-en-3β-ol, (3β,22E)-Ergosta-5,22-dien-3-ol, purity >95%, synthetic, $C_{28}H_{46}O$, FW 398.7, mp 144-146°C (mp lit 145-147°C, Fujimoto Y., et al. Chem. Pharm. Bull. 32, 4372 (1984)). *[474-67-9].*

Literature: Fujimoto Y., et al. Chem. Pharm. Bull. 32, 4372 (1984), Wright J.L.C. et al.: Can. J. Chem. 56, 1898 (1978), Pruna L. et al.: Pharmazie 36, 579 (1981), Fernholz E. et al.: J. Amer. Chem. Soc. 62, 1775 (1940) see also for biol. tests.

S3322-001 **BRASSICASTEROL ACETATE**

(22E)-Ergosta-5,22-dien-3β-ol Acetate

24-Methylcholest-5-en-3β-ol acetate, purity >95%, $C_{30}H_{50}O_2$, FW 442.7, mp 156-159°C (mp lit 150-152°C, Fujimoto Y., et al. Chem. Pharm. Bull. 32, 4372 (1984)). *[2458-53-9].*

structure as S3321-001 BRASSICASTEROL, with 3-*O* acetate

Literature: Fujimoto Y., et al. Chem. Pharm. Bull. 32, 4372 (1984), Fernholz E. et al.: J. Amer. Chem. Soc. 62, 1775 (1940).

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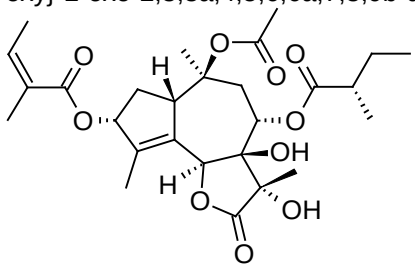
SESQUITERPENE LACTONE(S)

S3329-001 TRILOBOLIDE

(3S,3aR,4S,6S,6aS,8R,9bS)-6-(acetyloxy)-3,3a-dihydroxy-3,6,9-trimethyl-4-{[(2S)-2-methylbutanoyl]-oxy}-2-oxo-2,3,3a,4,5,6,6a,7,8,9b-decahydroazuleno[4,5-b]furan-8-yl (2Z)-2-methylbut-2-enoate



purity >95%, natural, isolated from *Laser trilobum* (L.) Borkh., $C_{27}H_{38}O_{10}$, FW 522.59, mp .190–192 °C; [α]D, 20 −66.3 (c 0.74 in MeOH (lit. Harmatha L., et. al.: Fitoterapia 89, 157 (2013)) *[50657-07-3]*.

Literature: Harmatha L., et. al.: Fitoterapia 89, 157 (2013); Kishkentayeva AQ. S., et. al.: Eurasian Chemico-Technological Journal *20*, 325 (2018); Kmonickova E., et al.: Fitoterapis *81*, 1313 (2010).

A compound structurally very similar to thapsigargin *[67526-95-8]* with analogous biological properties, i.a. an inhibitor of sarco/endoplasmic reticulum Ca2+-ATPase (SERCA); a potent immunostimulatory agent.

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				10mg	**100mg**	**1g**		
	S3312-001	(±)-JH II, 78%		450	3600	28800		
			1mg	**10mg**	**100mg**	**1g**	**3g**	**5g**
	S3314-095	20-OH-ecdysone 95%	10	30	165	990	2376	3713
	S3314-001	20-OH-ecdysone 98%	25	110	605	3630		
	S3331-001	Ponasterone A	45	245	1348			
	S3328-001	Polypodine B	35	180				
	S3330-001	Ajugasterone C	40	195				
			1mg	**10mg**	**100mg**	**1g**		
	S3315-001	Epicastasterone	34	220	1320	7920		
	S3316-001	Epibrassinolide	31	210	1260	7560		
	S3323-001	Homocastasterone	30	200	1200	7200		
	S3324-001	Homobrassinolide	30	200	1200	7200		
	S3317-001	SS-Epibrassinolide	30	200	1200	7200		
	S3318-001	SS-Epicastasterone	30	200	1200	7200		
	S3319-001	SS-Homocastasterone	30	200	1200	7200		
	S3320-001	SS-Homobrassionolide	30	200	1200	7200		
	S3329-001	Castasterone	34	220	1320	7920		
			1mg	**10mg**	**100mg**	**1g**		
	S3321-001	Brassicasterol	47	189	1040	6237		
	S3322-001	Brassicasterol 3-Ac	54	215	1183	7095		
			1mg	**5mg**	**10mg**	**100mg**		
	S3329-001	Trilobolide	140	440	790	5900		NEW

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