

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Astragalus membranaceus*

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	(3R)-(-)-7,2'-DIHYDROXY-3',4'-DIMETHYLISOFLAVAN7-O-BETA-D-GLUCOPYR...	Plant				--
0	2',3'-DIHYDROXY-7,4'-DIMETHOXYISOFLAVONE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	2'-HYDROXY-3',4'-DIMETHOXY-ISOFLAVONE-7-O-BETA-D-GLUCOSIDE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	3'-HYDROXYFORMONONETIN	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	3-O-BETA-DXYLOPYRANOSYL-25-O-BETA-D-GLUCOPYRANOSYL-CYCLOASTRAGENOL	Plant				--
0	6AR,11AR-10-HYDROXY-3,9-DIMETHOXYPTEROCARPAN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	7,3'-DIHYDROXY-9,10-DIMETHOXYPTEROCARPANE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	9,10-DIMETHOXYPTEROCARPAN-3-O-BETA-D-GLUCOSIDE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ACETYL-ASTRAGALOSIDE-I	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ALANINE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	ARGININE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
112	ASCORBIC-ACID	Root				--
0	ASH	Root	12800.0	80000.0	0.35526479427075014	--

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2	ASPARAGINE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
3	ASPARTIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASTRAGALOSIDE-I	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALOSIDE-II	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALOSIDE-III	Root				--
0	ASTRAGALOSIDE-IV	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALOSIDE-V	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALOSIDE-VI	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALOSIDE-VII	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAGALUS-SAPONIN-I	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASTRAGALUS-SAPONIN-II	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASTRAGALUS-SAPONIN-III	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASTRAISOFLAVAN	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRAMEMBRANAGENIN	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
3	ASTRAMEMBRANIN-I	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ASTRAMEMBRANIN-II	Plant				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	ASTRAPTEROCARPAN	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ASTRASIEVERSIANIN-I-XVI	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
53	BETA-CAROTENE	Root				--
47	BETA-SITOSTEROL	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
14	BETAINE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
102	CAFFEIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	CALCIUM	Root	560.0	3500.0	-0.42742749848868644	--
0	CALYCOSIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
14	CANAVANINE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
77	CHLOROGENIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
20	CHOLINE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
24	CHROMIUM	Root	0.3	0.8	-0.40048877739295385	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	COBALT	Root	0.4	2.5	-0.4909460027790993	--
12	COPPER	Root	1.0	9.0	-0.30116857246091955	--

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57	COUMARIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CYCLOGALEGINOSIDE-A	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CYCLOGALEGINOSIDE-B	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	D-FRUCTOSE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
1	D-GLUCOSE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	FAT	Root	3200.0	20000.0	-0.09603792277020924	--
61	FERULIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	FIBER(CRUDE)	Root		200000.0	2.6242208163218135	--
0	FIBER(DIETARY)	Root		600000.0	2.2013712801434733	--
23	FOLIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
16	FORMONONETIN	Root				--
0	FREE-AMINO-ACIDS	Root	5000.0	12600.0		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
22	GABA	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
8	GLUTAMIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	GUM	Root	16000.0	100000.0	-0.2627053187642807	--
6	IRON	Root	3.2	20.0	-0.4125973953033244	--

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0	ISOASTRAGALOSIDE-I	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ISOASTRAGALOSIDE-II	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	ISOASTRAGALOSIDE-IV	Root				--
4	ISOFERULIC-ACID	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	ISOLIQUIRITIGENIN	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
11	ISORHAMNETIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
75	KAEMPFEROL	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	KUMATAKENIN	Root	11.0	13.0		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	L-3-HYDROXY-9-METHOXYPTEROCARPAN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
27	LINOLEIC-ACID	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	LINOLENIC-ACID	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
65	MAGNESIUM	Root	800.0	5000.0	1.297512854456367	--
14	MANGANESE	Root				--
2	MOLYBDENUM	Root	0.1	10.0	2.6325714919134473	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
39	NIACIN	Root				--
4	PHOSPHORUS	Root	104.0	650.0	-0.5038891291778125	--
14	POTASSIUM	Root	1280.0	8000.0	-0.5695891878357887	--

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0	PROLINE	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	PROTEIN	Root	14400.0	90000.0	-0.3190660925574092	--
176	QUERCETIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
7	RHAMNOCITRIN	Root				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
15	RIBOFLAVIN	Root	0.4	2.5	-0.3445770066726076	--
0	RUBIDIUM	Root	11.0	13.0	0.0	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
60	SELENIUM	Root	0.2	1.0	-0.29131634494743897	--
4	SILICON	Root	3.2	20.0	-0.2510309186692663	--
1	SODIUM	Root	64.0	400.0	-0.32652648701580106	--
0	SOYASAPONIN-I	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
14	SUCROSE	Root				Chemical Constituents of Oriental Herbs (3 diff. books)
0	THIAMINE	Root	0.3	2.0	-0.46176774546761545	--
0	WATER	Root		840000.0	0.4631102003256906	--
77	ZINC	Root	0.8	5.0	-0.8399576796962069	--