



Product for anti-wrinkle, anti-aging

RED GINSENG ACTIVE-R




NaturalSolution

Head Office | #B-902, Digital Empire, 980-3, Youngtong-dong, Youngtong-gu, Suwon, Gyeonggi-do, Korea | Tel: +82.31.303.5240 Fax: +82.31.303.5245
Factory | #504, 158B 11L, 730-10, Gojan-dong, Namdong-gu, Incheon, Korea | Tel: +82.32.812.0530 Fax: +82.32.812.0531
www.naturalsolution.co.kr info@naturalsolution.co.kr

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Analytical Test



***in vitro* Efficacy Evaluation**

- Anti-oxidant Effect
- Anti-inflammatory Effect

- Anti-allergic Effect
- Skin Brightening Effect
- Anti-wrinkle Effect



***in vivo* Efficacy Evaluation**



Marketing Points



Product Information

PLANT STORY



Red ginseng is a representative medicinal herb in Traditional Korean Medicine and has been used for thousands of years. The name of red ginseng is from the color that it takes on during a special preservation method that involves being steamed or sun dried. In Traditional Oriental Medicine, red ginseng is used for many purposes including promoting yang energy, improving circulation and in restoring balance and strength.

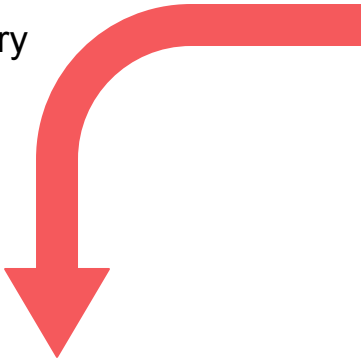
PLANT STORY



Scientific research has indicated *Panax ginseng* to possess various pharmacological properties such as anti-diabetic, anti-oxidant, anti-carcinogenic, anti-aging and anti-inflammatory actions. One of the main components of *P. ginseng* are ginsenosides, which are a class of steroid glycosides. In addition to these compounds are the triterpene saponins which are biologically active compounds with anti-inflammatory and anti-wrinkle actions.

WHITE GINSENG VS. RED GINSENG

Dry



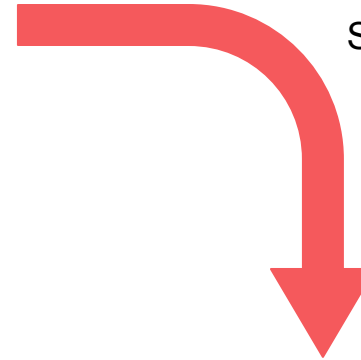
White Ginseng

(generally known as Korean Ginseng)



Fresh ginseng

4-6 years old



Steam and dry
for 9 times



Red Ginseng

(different ginsenoside composition
increase in ginsenoside content)

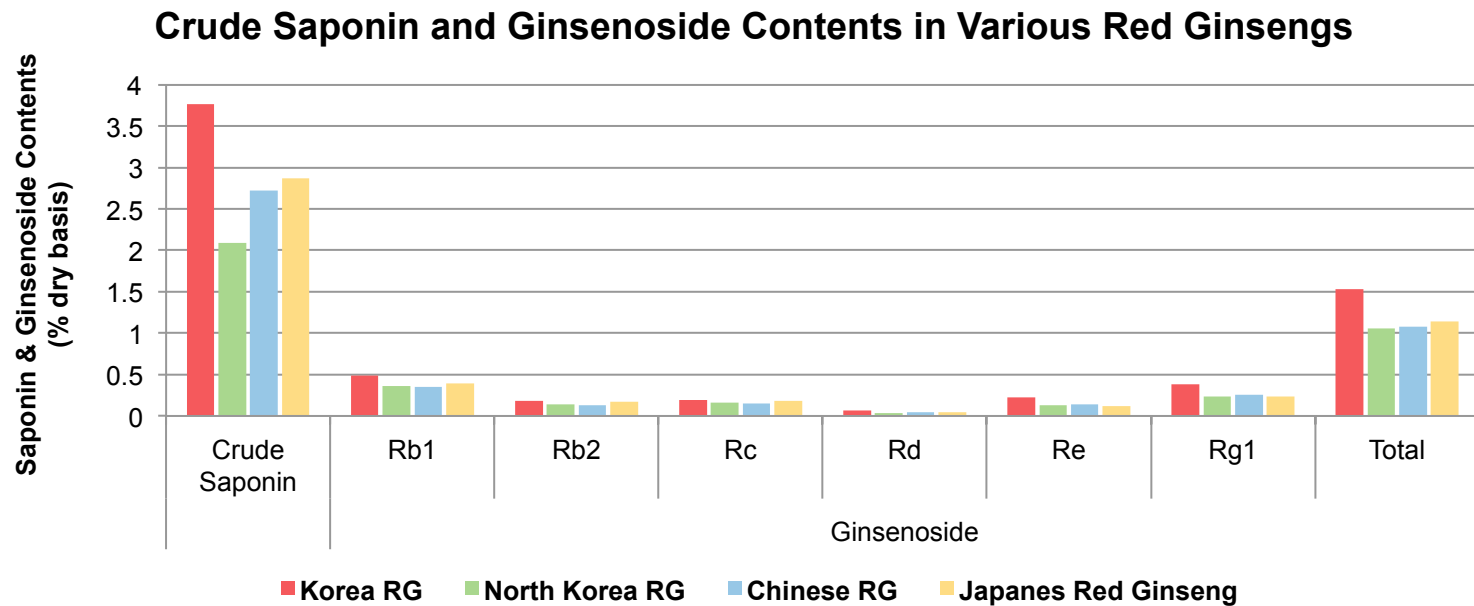
WHITE GINSENG VS. RED GINSENG - GINSENOSES

Ginsenosides in Common	Ginsenosides in White Ginseng	Ginsenosides in Red Ginseng
Ro, Ra1, Ra2, Ra3, Rb1, Rb2, Rb3, Rc, Rd, Re, Rf, Rg1, Rg2, Rg3, Rh1, R1	Rb1, Rb2, Rc, Rd, R1, R2	Rg2, Rg3, Rg5, Rh1, Rh2, Rk1, Rf2, Rs1, Rs2, Rs3, Rs4, R4, Rh4, Rg6, F4, etc.

The comparative understanding between Red Ginseng and White Ginsengs processed ginseng (Panax ginseng C. A. Meyer), Ki-Yeul Nam, J Ginseng Res, 2005, 29(1), p.1-18

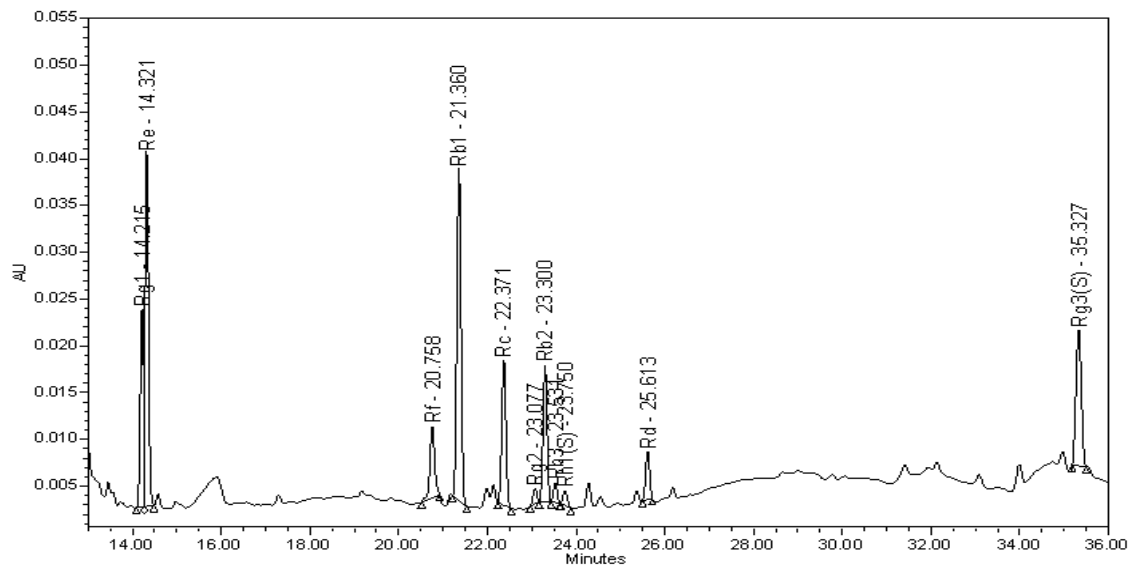
KOREAN RED GINSENG VS. OTHERS

- GINSENOSES



Comparison of the content of saponin and mineral component in Korean Red Ginseng and other Red Ginseng, Lee et al., J Ginseng Res, 2002, 26(4), p.196-201

GINSENOSIDES IN RED GINSENG ACTIVE-R

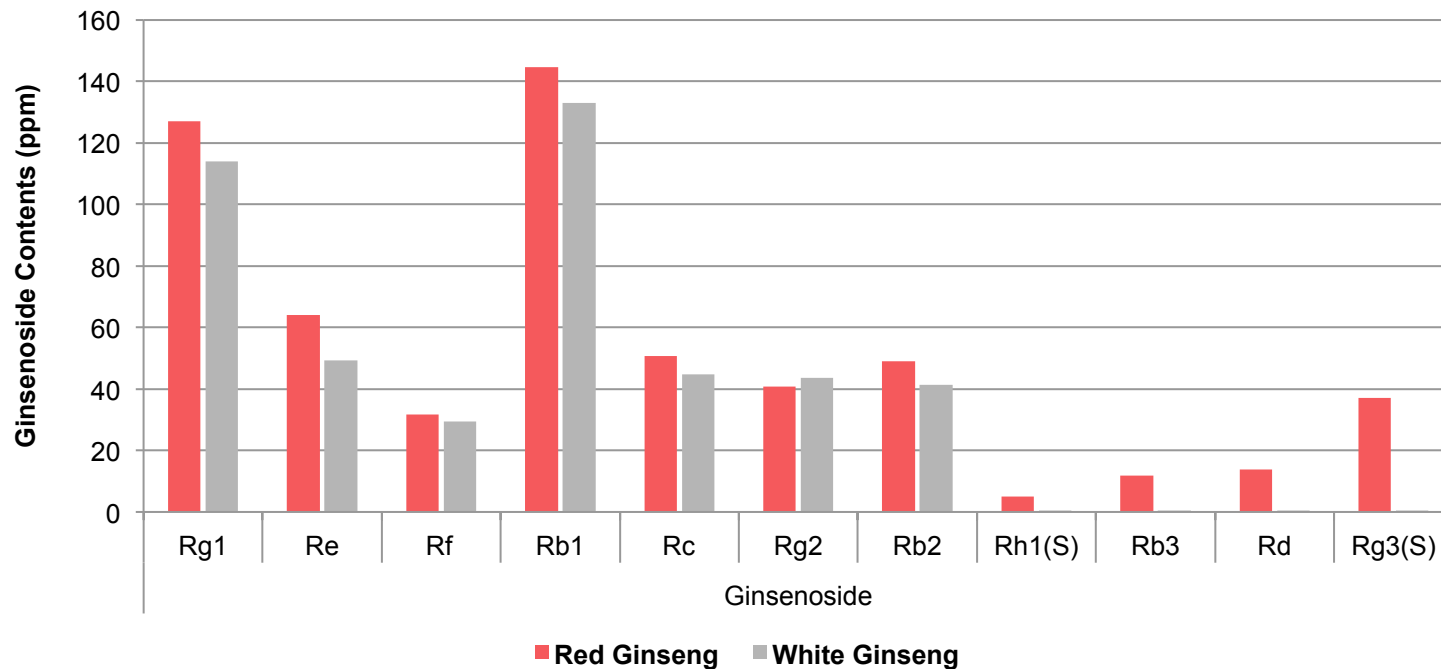


Component Results

	Name	RT	Area	Height	Amount	Units
1	Rg1	14.215	112229	20896	33.748	ppm
2	Re	14.321	196845	37764	64.692	ppm
3	Rf	20.758	56784	7669	18.453	ppm
4	Rb1	21.360	229497	35681	73.720	ppm
5	Rc	22.371	102877	15531	40.468	ppm
6	Rg2	23.077	9907	1623	3.135	ppm
7	Rb2	23.300	93035	14498	35.264	ppm
8	Rb3	23.531	12051	2079	3.574	ppm
9	Rh1(S)	23.750	10212	1526	2.468	ppm
10	Rd	25.613	30889	5063	8.260	ppm

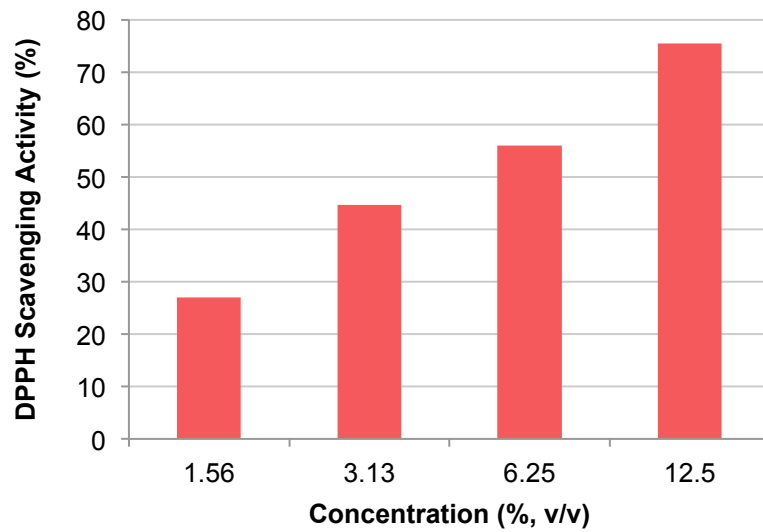
WHITE GINSENG VS. RED GINSENG - GINSENOSES

Ginsenoside Contents in White Ginseng and Red Ginseng

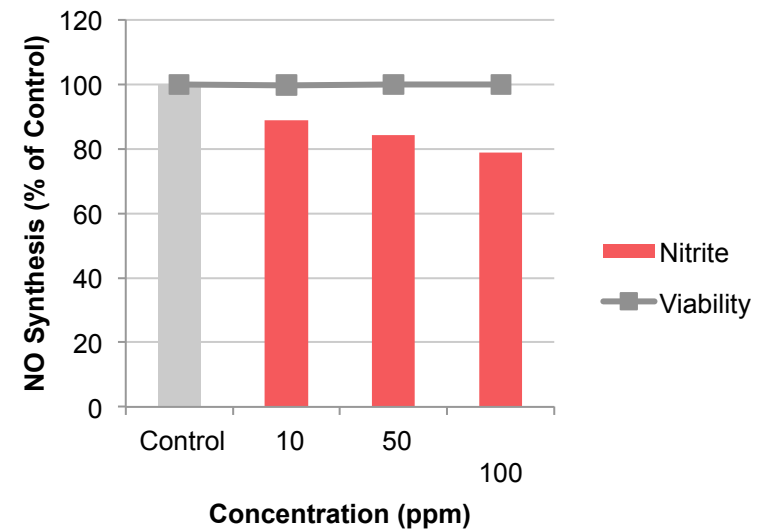


IN VITRO EVALUATION

 **Anti-oxidant Effect**
DPPH Scavenging Activity



 **Anti-inflammatory Effect**
Nitrite Synthesis Inhibition in Macrophages (RAW 264.7)

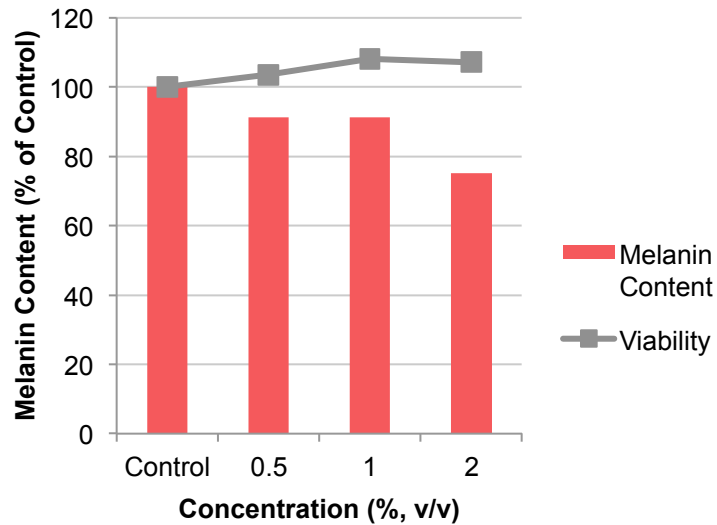


IN VITRO EVALUATION



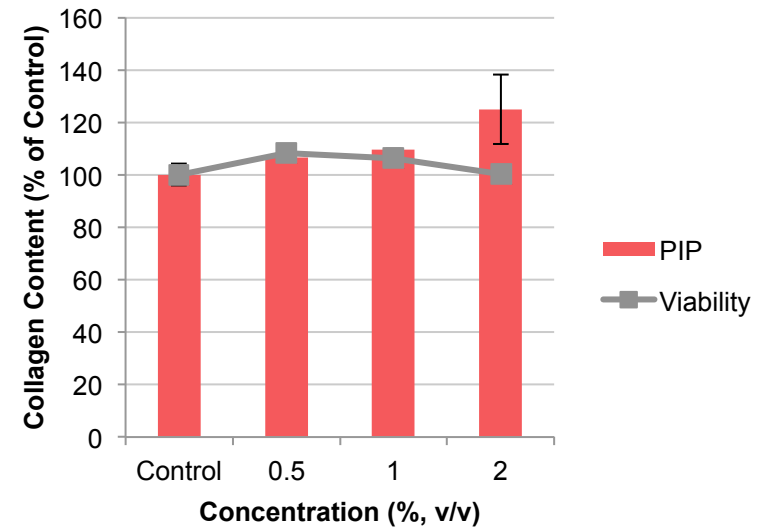
Skin Brightening Effect

Melanin Synthesis Inhibition in Melanocytes

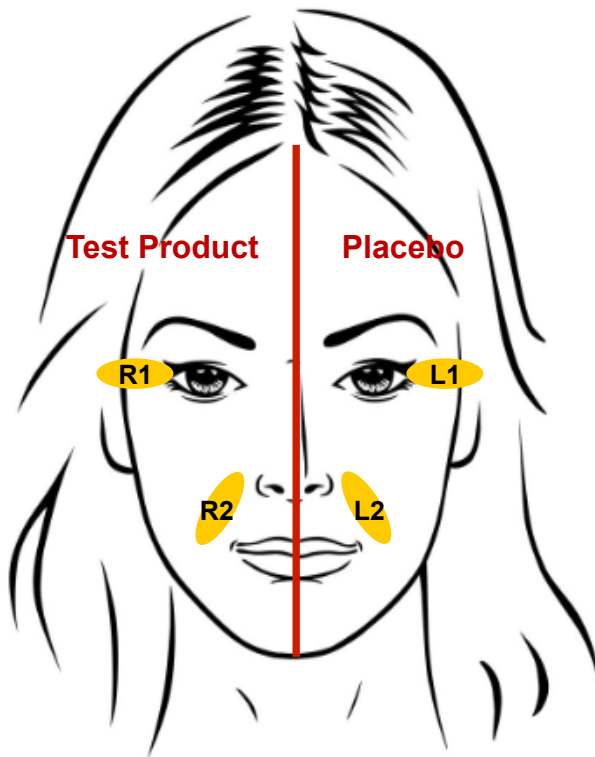


Anti-wrinkle Effect

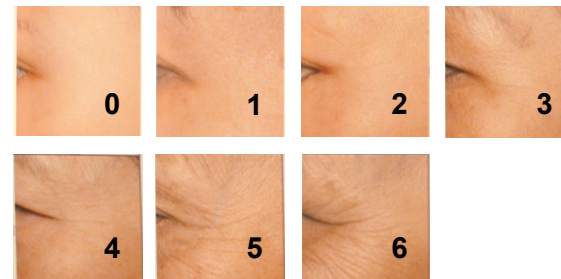
Collagen Synthesis Activity in Fibroblasts



IN VIVO EVALUATION: ANTI-WRINKLE

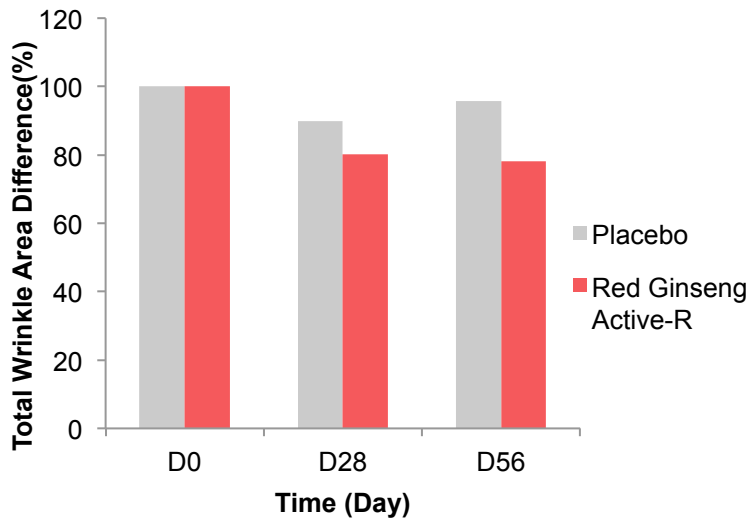


- Target site: R1, L1 - Canthus
R2, L2 - Nasolabial folds
- Subjects: 21 females aged between 45 to 65 years old
- Test item: Cream with 2% Red Ginseng Active-R
- Application: Twice a day for 8 weeks
- Test instrument:
 - Elasticity: MPA 580 (CK Electronic GmbH, Germany)
 - Wrinkle: SILFLO (CuDerm, USA),
Visioline VL650 (CK Electronic GmbH, Germany)
- Dermatologist's evaluation (Scoring reference):

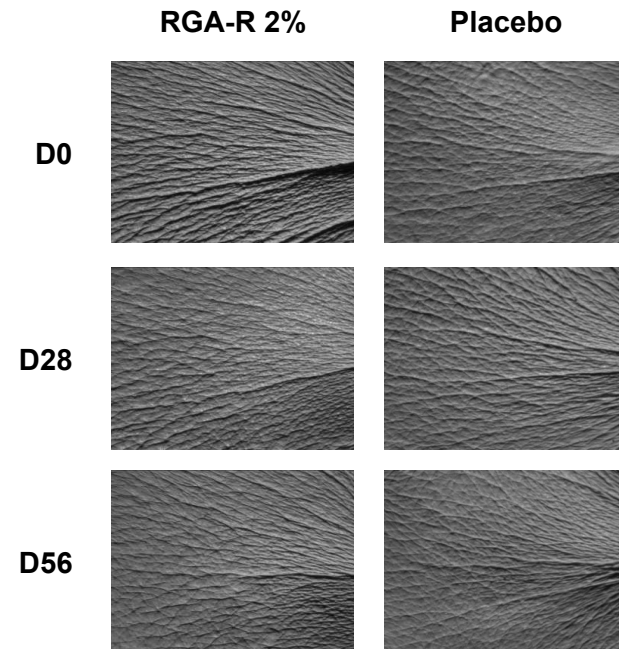


IN VIVO EVALUATION: ANTI-WRINKLE

 Total Wrinkle Area Difference



 Photograph Visualization




PRODUCT INFORMATION

 **Product Name:** Red Ginseng Active-R(PD)



 **INCI Name:** Panax Ginseng Root Extract

 **Dosage:** 1 – 3%

 **Formulation:** Add to the formulation when the temperature is lower than 55°C. Recommended to add after the cooling process.

 **Storage:** Avoid direct light or UV. Keep it in a cool and dry area.

The one who knows natural products

Go for

Nature,

Go with

Natural Solution!

"We are always upgrading to serve you better"

