



# SpecPlex<sup>®</sup> Gloss

Invention Patent application  
is being accepted

Lactobionic Acid, Carnosine, Nonapeptide-1, Tranexamic Acid, Mandelic Acid, Niacinamide

**The six skin brightening ingredients** cooperate with each other  
Adorned beauty convert into **Natural Beauty**

## Features

- Natural Original Complex with NOI=80%
- Safe and gentle to delicate skin, as well as to sensitive skin
- Soften skin surface and remove dead skin cells, smoothen sags and crests, normalize keratinization
- Boost the production of collagen ( $\uparrow >400\%$  @ 0.1%) and Glycosaminoglycans (GAGs)
- Strengthen the structural and biochemical support of Skin's extracellular matrix (ECM) and skin barrier
- Plumping skin and increase skin elasticity
- Enhance your natural glow, cast Skin Highlighter and luster
- Relieve skin stress, show anti-allergic property, make skin multi-active
- Even skin tone, leave skin healthy/natural-looking
- Prevent and fade dull and yellowish tone, inhibit melanin deposit
- Nourish skin both externally and internally

# SpecPlex® Gloss

Product code	110052
INCI name	Lactobionic Acid, Carnosine, Nonapeptide-1, Tranexamic Acid, Mandelic Acid, Niacinamide, Glycerin, 1,2-Hexanediol & Ethylhexylglycerin, Aqua
CAS No.	96-82-2, 305-84-0, 158563-45-2, 1197-18-8, 90-64-2, 98-92-0, 56-81-5, 6920-22-5 & 70445-33-9, 7732-18-5
EC No.	202-538-3, 206-169-9, --, 214-818-2, 202-007-6, 202-713-4, 200-289-5, 230-029-6 & 408-080-2, 231-791-2
Application	Whitening/lightening, removing yellow, light spot, anti-aging (improve skin elasticity), antiglycosylation, moisturizing and etc.
Dosage	0.5-10.0%
Storage	Store in a cool, ventilated place and keep container tightly sealed
Shelf life	2 years
Package	25kg

## Safety Test

∅ No Skin irritation & Corrosion

∅ No Heavy Metals (As, Cd, Hg, Pb)

∅ Non-cytotoxic

### Promoting effect of SpecPlex® Gloss on collagen content in fibroblasts (In vitro)

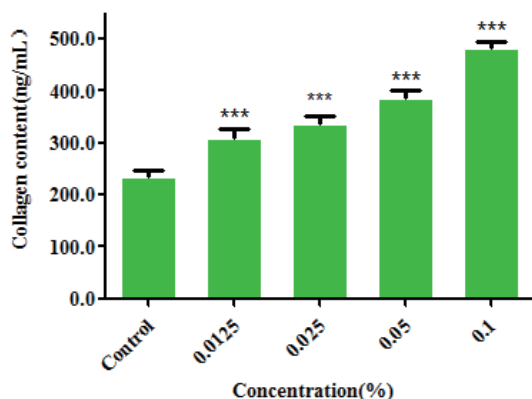
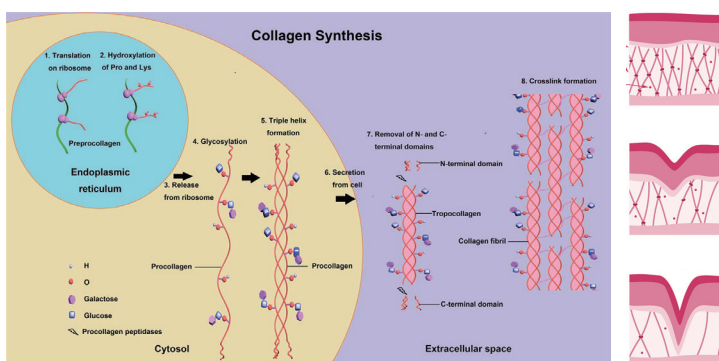
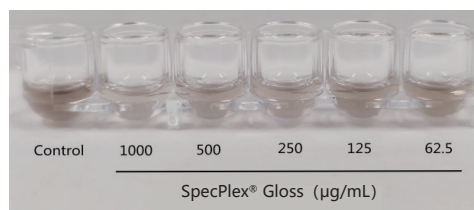


Fig.1 Cell collagen content in different groups (\*\*P<0.001 vs. control cells)

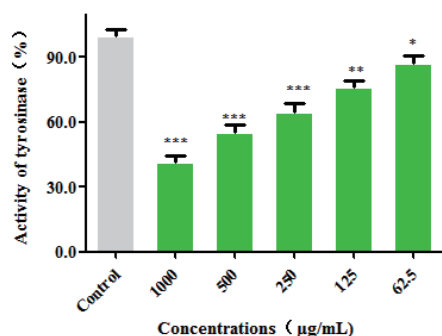


SpecPlex® Gloss promoted the collagen content in fibroblasts, and the promotion rate reached 105% when the concentration was 0.1%, and the promotion effect was concentration-dependent.

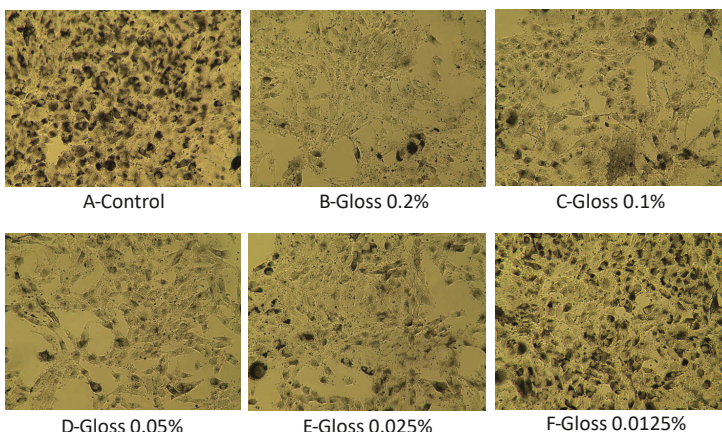
### Inhibition effect of SpecPlex® Gloss on tyrosinase activity in melanocytes (In vitro)



Tyrosinase activity in different groups

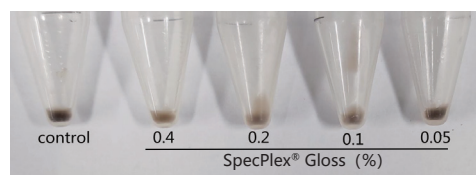


(\*p<0.05, \*\*p<0.01, \*\*\*p<0.001 vs. control)

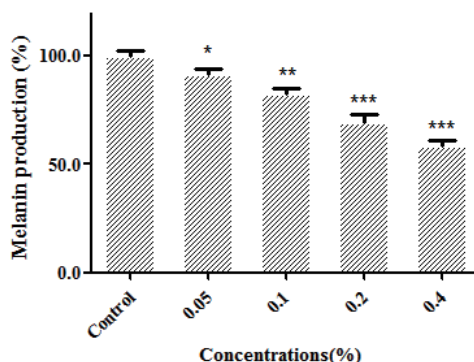


Dopa staining of melanocytes (A and B-F were the control group and SpecPlex® Gloss group (0.2%, 0.1%, 0.05%, 0.025% and 0.0125%, respectively). The larger and darker of the dark brown area, the higher the activity of tyrosinase in the cells .

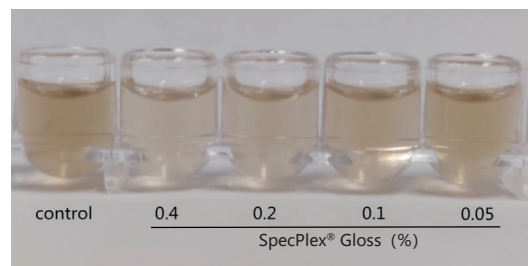
## Inhibition effect of SpecPlex® Gloss on Melanin production (In vitro)



B16F10 melanocytes collected by centrifugation in different groups (the darker the color, the higher the melanin production)



Inhibition effects of different concentrations of SpecPlex® Gloss on melanin production (\*p<0.05, \*\*p<0.01, \*\*\*p<0.01 vs.control)



According to the results of cell tyrosinase activity test and cell dopa staining experiment, SpecPlex® Gloss can inhibit the activity of tyrosinase in melanocytes. The inhibition rate is 58.5% at 0.1% and IC50 is 633µg/mL (≈0.0633%) .

In addition, it also has a significant inhibitory effect on the production of melanin in B16F10 melanocytes, the inhibitory rate reached 41.4% when the concentration was 0.4%.The inhibition effect is concentration dependent.

## Clinically Brightening Effect of SpecPlex® Gloss (Clinical)

Fig1 Changes in the value of the parameters at different time

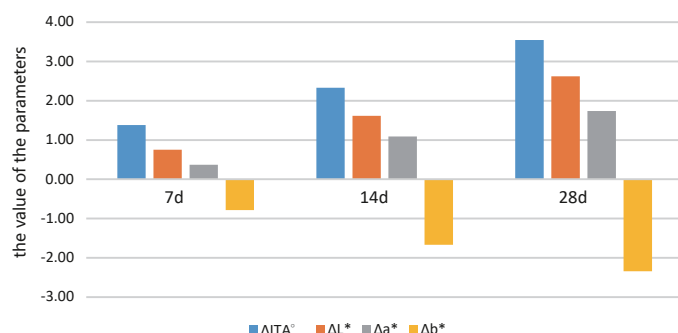
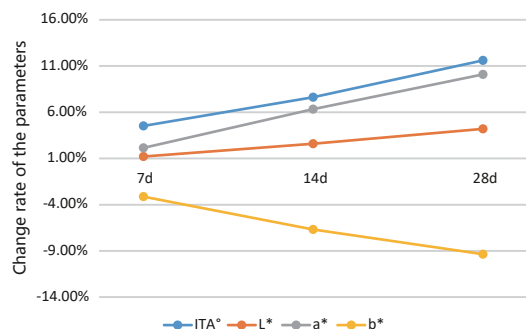


Fig2 Change rate of the parameters at different time

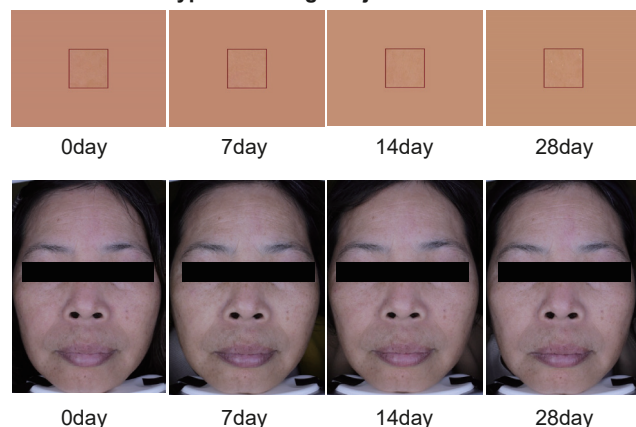


The three coordinates of CIELAB represent the lightness of the color ( $L^* = 0$  yields black and  $L^* = 100$  indicates diffuse white; specular white may be higher), its position between red and green ( $a^*$ , where negative values indicate green and positive values indicate red) and its position between yellow and blue ( $b^*$ , where negative values indicate blue and positive values indicate yellow).

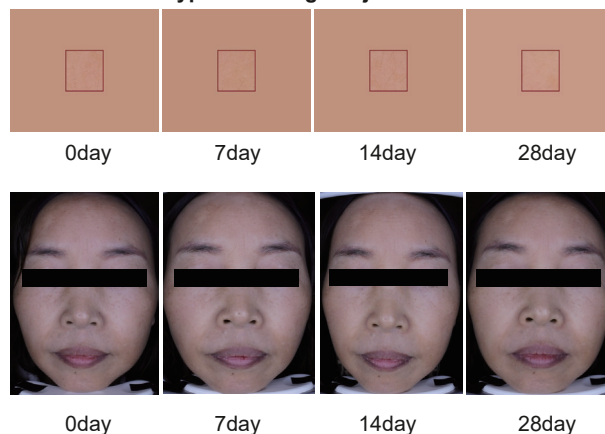
### Summary:

According to theory of Individual Typology Angle & CIELAB Color Space and above results, 5% SpecPlex® Gloss can leaves skin harmoniously and healthily pink-reflecting beauty with white, rather than limiting to a pure white skin color.

### Skin Photos of Typical Testing Subject 1



### Skin Photos of Typical Testing Subject 2



## Recommended formula

### Brightening Cream

#### SpecPlex® Gloss

Product Name	INCI Name	w/w%	Function
<b>A</b> Cetearyl Olivat & Sorbitan Olivat		3.0	Emulsifier
Cetyl Palmitat & Sorbitan Palmitat and Sorbitan Olivat		1.5	Emulsifier
<b>SpecSufc® M68</b>	Cetearyl Glucoside &Cetearyl Alcohol	0.5	Emulsifier
<b>SpecKare® GTCC</b>	Caprylic/capric Triglyceride	2.0	Emollient
Isopropyl Myristate		1.0	Emollient
Dicaprylyl Carbonate		3.0	Emollient
Butyrospermum Parkii (Shea Butter)		1.0	Emollient
<b>SpecThem® C1618</b>	Cetearyl Alcohol	2.0	Emollient
<b>SpecThem® GMS</b>	Glyceryl Stearate	1.0	Emulsifier
<b>SpecKare® 3GF</b>	Glyceryl Linoleate & Glyceryl Oleate & Glyceryl Linolenate	4.0	Humectant, Emollient
Dimethicone		2.0	Tactile Enhancers
<b>B</b> Disodium EDTA		0.1	Chelating Agent
Water		To 100	
Glycerin		5.0	Humectant
Propylene Glycol		3.0	Humectant
<b>SpecPlex® Gloss</b>	Lactobionic Acid, Mandelic Acid, Tranexamic Acid, Carnosine, Nonapeptide-1, Niacinamide, Glycerin, 1,2-Hexanediol &Ethylhexylglycerin, water	5.0	Whitening Agent
<b>SpecThem® XTG200</b>	Xanthan gum	0.15	Stabilizer
Sodium Hydroxide (20%)		q.s.	pH controlling Agent
<b>C</b> Sodium Acrylate / Sodium Acryloyldimethyl Taurate Copolymer		0.6	Stabilizer
Water		5	
<b>D</b> <b>SpecPlex® PCalm</b>	Palmitoyl Tripeptide-8, Poria Cocos Sclerotium Extract, Portulaca Oleracea ( PORTULACA OLERACEA) Extract, Glycerin, Aqua, Dipotassium Glycyrrhizate, Caprylyl Glycol & Ethylhexylglycerin	3.0	Relieve anti-allergic
<b>SpecKare® DPA</b>	Panthenol	0.5	Humectant
<b>E</b> <b>ParbFree® CE85</b>	Caprylyl Glycol, Ethylhexylglycerin	1.0	Preservative

#### Procedure:

1. Mix Phase A and heat to 80 °C, stirring until completely dissolved;
2. Mix Phase B components and stir well;
3. Add Phase A into B, homogenize for 3-5min;
4. Disperse Phase C and cool the base below 60 °C, then add Phase C to above sample;
5. Cool the base below 45 °C, add Phase D, stirring until room temperature.



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