

TimeSel-BAM™

- Skin vital effect ingredient produced by ecofriendly Time-Drop™ process -

Applicable products of TimeSel-BAM™

Cosmetics ; skin, lotion, mask pack, essence, massage cream, eye cream
Personal care products ; hair conditioner, body care goods, etc



What is TimeSel-BAM™ ?

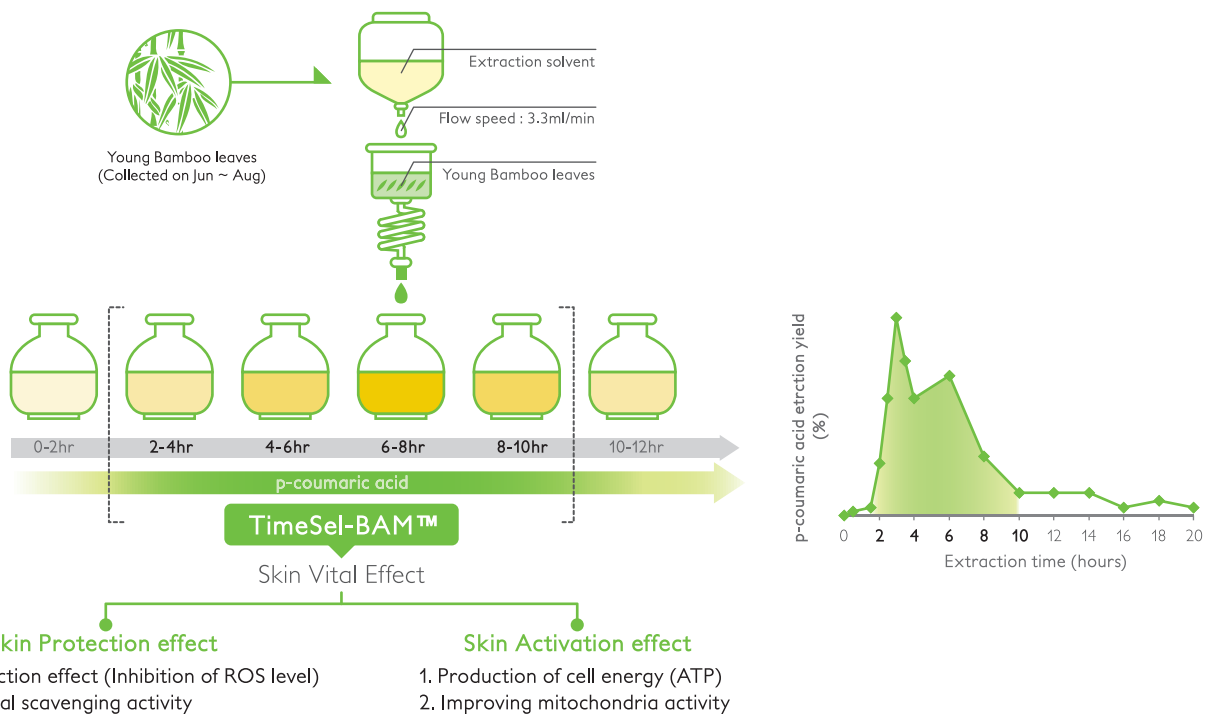
TimeSel-BAM™ is a skin vital effect ingredient derived from fresh young bamboo tea leaves. It has been produced by Time-Drop™ process, TimeSel-BAM™ will help skin vital effect by bring highly concentrated life energy of bamboo leaves.

Main Ingredients



Common name	Young Bamboo leaves
Latin name	Bambusa Vulgaris Extract
Main ingredient	p-coumaric acid, Gibberellic acid
	<i>young bamboo tea leaves contains more p-Coumaric acid and 1.5 times higher total polyphenol than matured on.</i>
Biological effects	Anti-oxidant, Anti-stress, ATP synthesis etc

Explain about Time-Drop™ process and mechanism for TimeSel-BAM™



SPECIFICATION

INCI Name

Appearance

p-coumaric acid

Total polyphenol contents

Dosage

Shelf life

Butylene Glycol / Water / Bambusa Vulgaris Extract

Light brown ~ brown

100ppm

0.1%

0.5% to 2%

2 years

Main Biological Effects for Cosmetics

● Cell protection effect

<ROS level (% of H₂O₂) >

Control	← H ₂ O ₂ treated →				
	None	Quercetin (0.001%)	TimeSel-BAM™		p-coumaric acid (5 µg/ml)
			1%	2%	
42 ± 2.1	100 ± 6.1	53 ± 3.8	55 ± 5.1	40 ± 2.1	45 ± 2.8

We tested ROS production rate against oxidative stress, In results, TimeSel-BAM™ was shown that reduced intracellular ROS production rate of negative control in dose-dependent manner.

● Production of cell energy (ATP)

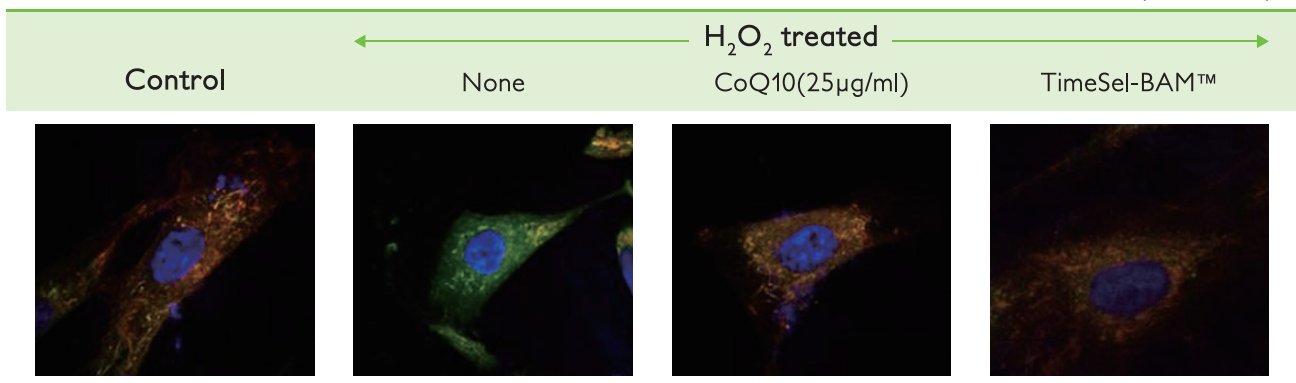
<ATP concentration (% of control) >

Control	← H ₂ O ₂ treated →				
	None	CoQ10 (25µg/ml)	TimeSel-BAM™		p-coumaric acid (5 µg/ml)
			1%	2%	
100 ± 3.5	60 ± 4.9	90 ± 3.4	88 ± 5.1	96 ± 2.1	89 ± 2.8

When treated of TimeSel-BAM™ to cell that pre-treated H₂O₂, it shows increase of ATP synthesis Also, active ingredient of bamboo tea leaves, p-coumaric acid showed good ATP synthesis effect.

● Improving mitochondria activity

<ATP concentration (% of control) >



Healthy mitochondria has high membrane potential and produce high energy. In the JC-1 staining test, when mitochondria has high membrane potential, it shows red fluorescent colors. When treated 2% of TimeSel-BAM™ to cell that pre-treated H₂O₂, it shows red fluorescent color as well as CoQ10.