PLANOXIA-BW

- Purpose for natural heavy metal chelator -

Applicable products of PLANOXIA-BW

Skin Care : Skin, Lotion, Essence, Cream, Mask Pack, Facial Wash, Soap, Etc
Hair Care : Hair Conditioner, Shampoo, Hair Essence, Etc
Body Care : Body Cleanser, Body Lotion, Etc .

What is PLANOXIA-BW ?

PLANOXIA-BW is derived from nature as a heavy metal chelating agent. It is developed for those who are craving for detoxifying from heavy metal. PLANOXIA-BW is a Korean buckwheat extract which is carries big amounts of phytic acid as a natural heavy metal chelator and also has rutin compound as an anti-oxidant agent

Main Ingredients

Common name	buckwheat
Latin name	Fagopyrum esculentum
Main ingredients	Flavonoids (rutin, orientin, vitexin, quercetin, isovitexin, isoorientin) Amino acids (arginine, lysine, cystine, histidine, glycine, alanine, valine, leucine, glutamic acid, phenylalanine), Phytic acid
Biological effects	Anti-oxidants, Anti-lipid peroxidation effect, Inhibition of immediate-type allergic reaction

buckwheat has long been used as therapeutics for anti-inflammation, detoxification and lowering the fever in Korean folk medicine.

Analysis of Rutin & Phytic acid contents

Buckwheat extract	Contents (mg/100g)	
	Rutin	Phytic acid
Seed coats	12	20
Seeds	34	178
Stems	1,827	706

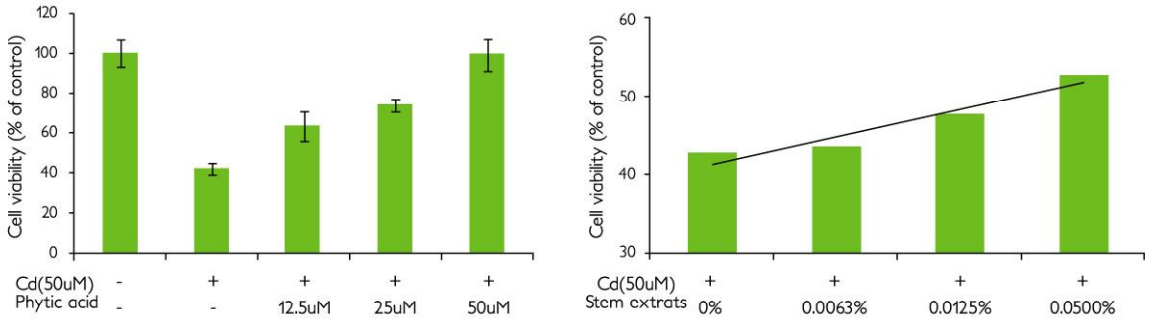
SPECIFICATION

INCI Name	Water / Butylene glycol / Polygonum Fagopyrum (Buckwheat) stem extract (in process)
Colour	Brown liquid
Dry residue (110℃)	0.5% ± 0.05%
Water	Nearly 40%
Butylene Glycol	60%
Preservative	Non-added
Packaging unit	5kg / 10kg / 20kg
Shelf life	2 year properly stored
Dosage	1 % ~ 3%

Main Biological Effects for Cosmetics

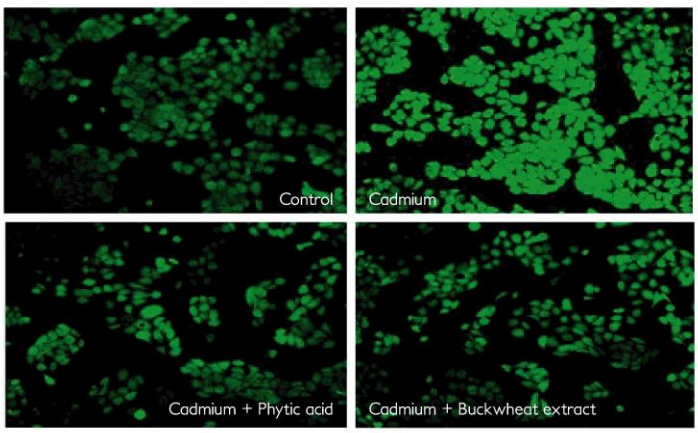
● Heavy metal chelating effect of stem extract of the Buckwheat extract

1. Anti-cytotoxicity effect of the phytic acid and buckwheat stem extract.



Protective effect of Phytic acid and Buckwheat stem extracts on cadmium(Cd) mediating toxicity

2. Inhibition effect of ROS(Reactive oxygen speices) produce of the phytic acid and buckwheat stem extracts mediated from cadmium (Cd)



Identification of cadmium-mediated intrecellular generation reactive oxygen species and its elimination by confocal laser microscope
(Cd : 50㎛, phytic acid : 50㎛, buckwheat stem extracts : 0.05%)

Buckwheat stem extracts shows powerful inhibitors of ROS production in skin cell from heavy metal toxicity and also it can inhibit cell toxicity in a dose-dependent manner

RADIANT
Free radicals & Antioxidants

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