# Ferulic Acid

It has a melanin generation inhibiting effect.

Recently, inhibition of the growth of bacteria and

UV absorption effect are gathering attention.



## Natural lignin from rice

Ferulic acid is an essential substance to make crosslinked structure of plant cell wall. It is widely distributed in an organ of many plant. Like other phenolic compound, it has a good antioxidative effect and reacts with radical such reactive oxygen species.

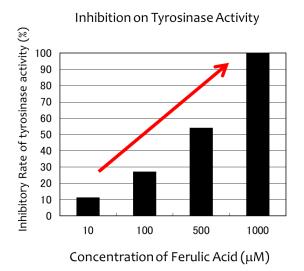
This ferulic acid is from rice and it is high quality and manufactured effectively. (patent# 1398500)

#### **Ferulic Acid-Introduction**

- \*\* Derivative of cinnamic acid with molecular formula  $C_{10}H_{10}O_4$ .
- Commonly found in seeds of plants such as rice, wheat and oats.
- Together with dihydroferulic acid, a component of lignocelluloses that confers cell wall rigidity
- Documented biomedical properties: antioxidant, UV-absorbant, inhibitor of decarboxylation etc.

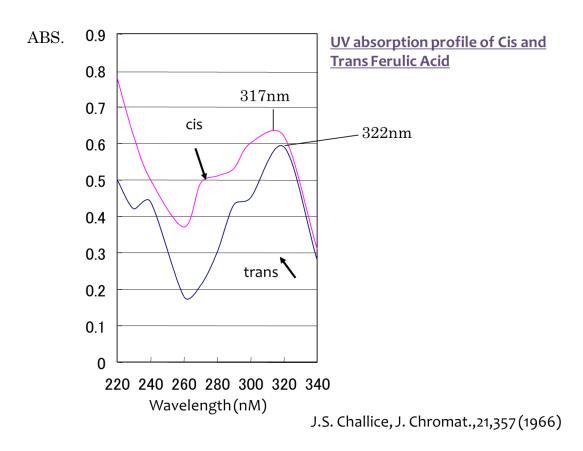






Ferulic Acid demonstrate a concentration-dependent inhibition on tyrosinase activity!

#### Ferulic Acid- UV Absorption





#### **Ferulic Acid- Cosmetic Effect**

- Vitamin E Ferulic Acid Ester:
  - inhibit melanin production
  - tyrosinase inhibitory effect
  - enhance fibroblasts growth
- Amino Acid Ferulic Acid Ester
  - tyrosinase inhibitory effect

### Ferulic Acid – Product Specification

Test item	Specifications
Characteristics	White~slightly yellowish powders
Identification	
(1)UV absorbance	Absorption maxima;
	234-238nm, 320-324nm
Purity	
(1) Heavy metals	20ppm or less
(2) Arsenic	2ppm or less
Loss on drying	0.5% or less
Ignition residue	0.1% or less
Assay (HPLC)	Not less than 98.0%
Microbial test	
(1) Total aerobic germs	1000 cfu/g or less
(2) Coliform group	Negative
(3) Moulds • Yeasts	100 cfu/g or less

INCI	Ferulic Acid (100%)
Derivation	Rice bran · Rice germ
Country of origin	Japan



