DS-CERAMIDE AP

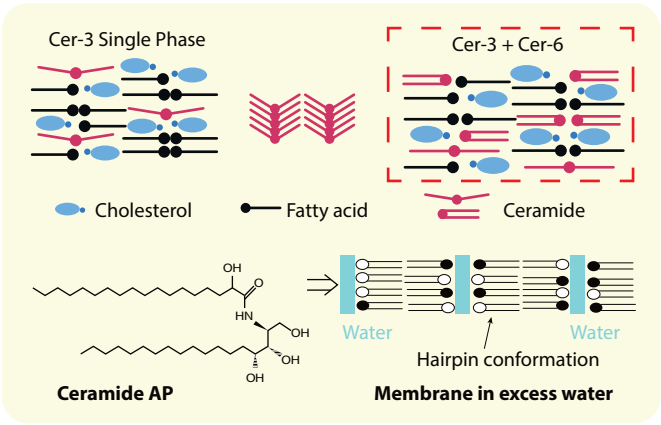
- **High purity Ceramide identical to those in natural skin**
- **Strengthening skin barrier function**
  - Retention of moisture content within skin
- **Leading to healthy skin peeling and mild desquamation**
- **Prevention of deposition and penetration of pollutants on skin**
- **Produced by Yeast fermentation process**

Product Identification

INCI Name	Ceramide AP (Retired. Ceramide 6II)
Appearance	White to off white powder
Active Ingredient	
- INCI name	: Ceramide AP (Ceramide 6II)
- Chemical name	: (2S, 3S, 4R)-2-(2-Hydroxyoctadecanoylamido)-1,3,4-octadecanetriol
- Contents	: m.t. 90% by HPLC

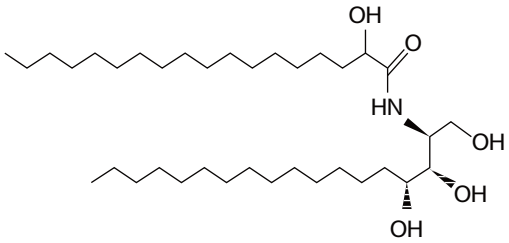
Product Efficacies

Higher Skin Hydration



Synergetic effect : Ceramide AP, which has four OH group, allows hairpin structures to be formed, resulting in a stable and higher water retention.

Mild skin peeling agent

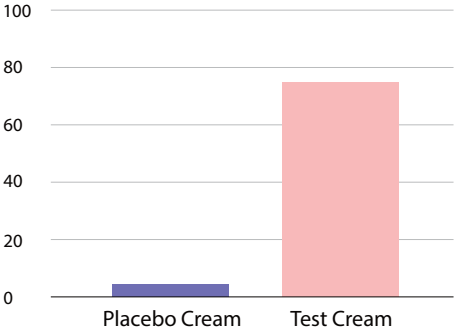


α-hydroxyl fatty acid + Phytosphingosine

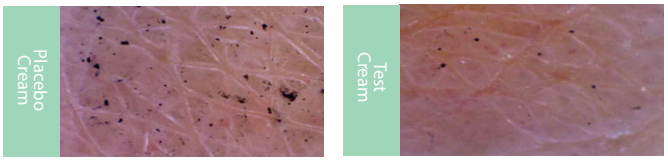
Mild desquamation : Similar structure to that of AHA (Alpha hydroxyl acids), accordingly, Ceramide AP functions as the mild AHA. Ceramide AP is less acidic unlike AHA itself, it is expected to have less irritation to skin and to avoid weakening skin proteins.

Anti-Pollution : Prevention effect on Fine Dust Absorption (*In vivo* , KFDA guideline)

Preventing particle adsorption (%)



Optical Photography analysis



- Subjects : 21 people (Avg. age : 36.1+/-10.67)
- Test : One time application/ Cream containing 1.5% Ceramide AP
- Methods
  - Application of Test/Placebo cream at inner-side of forearm
  - 20 minute after cream application, fine dust was applied in designed chamber (Particle material: Black Carbon Powder 1㎛)
  - Optical photography analysis

Formulations were applied on the inner side of forearm. Pollution area (Pixels) for each condition are recognized by Image J (NIH, USA). Analysis on the magnified image reports that test cream including 1.5% Ceramide AP leads higher prevention particle adsorption by 74% compared to the placebo cream w/o Ceramide AP.