



## DS-CERAMIDE BP

- **New Class of Ceramide**
  - Vernix Caseosa in infant baby consists of Branched Chain Fatty Acid and BCFA bound ceramide.
  - Natural Defense System : Only for Human, Only at Birth
- **Strengthening skin barrier function**
- **Retention of moisture content within skin**
- **Prevention of deposition and penetration of pollutants on skin**

### + Product Identification

<b>INCI Name</b>	Ceramide BP (Sphingolipids)
<b>Appearance</b>	White to off white powder
<b>Active Ingredient</b>	
- INCI name	: Ceramide BP (Sphingolipids)
- Chemical name	: (2S, 3S, 4R)-2-(16-methylheptadecanoylamido)-1,3,4,-octadenetriol
- Contents	: m.t. 90% by HPLC

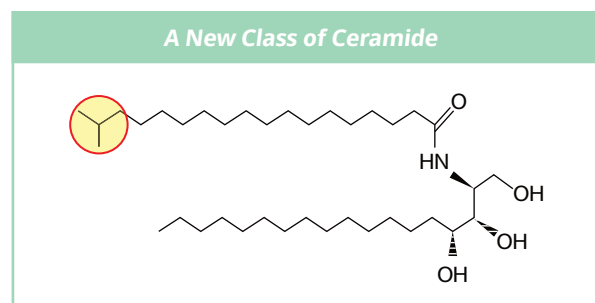
### + Product Efficacies

#### - Vernix Caseosa: Natural Defense System

'Vernix Caseosa' (胎脂)

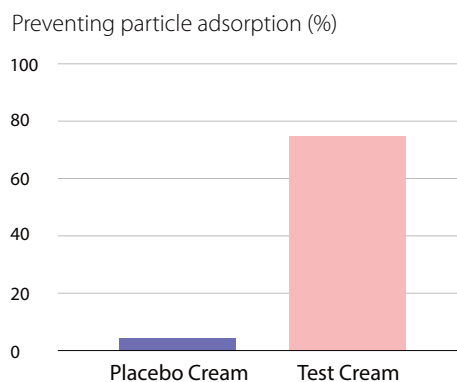


- Moisturizing the infant's skin
- Physical barrier to bacteria
- Protect skin from environmental stress
- Wound healing ability
- **Consist of Branched Chain Fatty Acid (BCFA) and BCFA bound ceramide**

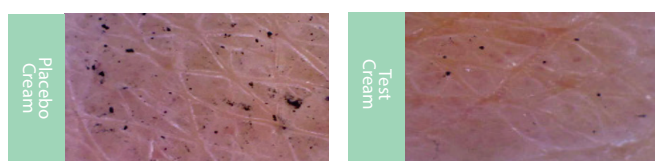


- Immediate effect: Fine Coating
- Short term effect: Hydration Increase
- Long term effect: Strengthen Skin Barrier

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



Optical Photography analysis



- Subjects : 21 people (Avg. age : 36.1+/-10.67)
- Test : One time application/ Cream containing 1.5% Ceramide BP
- 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 $\mu$ m)
  - 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 BP leads higher prevention particle adsorption by 76% compared to the placebo cream w/o Ceramide BP.