

BRIGHTENING COLLAGEN STIMULATOR

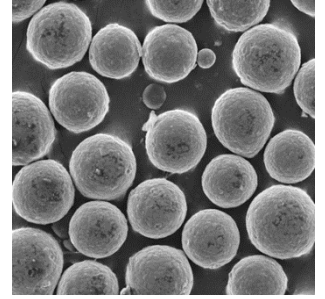
Calcium Hydroxyapatite Biostimulator
FACETEM

PRODUCT INFORMATION

FACETEM is a Biostimulator made of **Calcium hydroxyapatite**, a biocompatible substance that is naturally found in human bones and teeth.

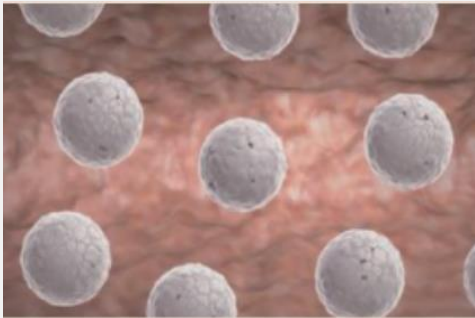
Not only immediate volume and collagen stimulation, FACTEM supports skin brightening effect by applying CGBIO's outclassed CaHA sintering technology.

Distilled water for injection is used.



FACETEM Working principle

STEP 1

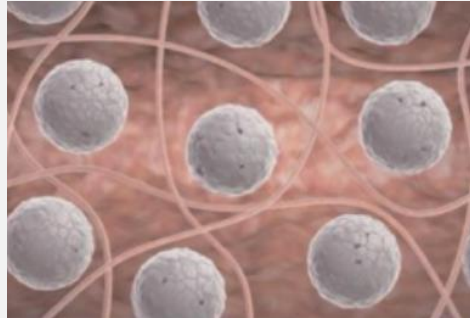


Inject FACETEM

that is comprised of CaHA microspheres suspended in the Carboxymethyl cellulose gel carrier



STEP 2

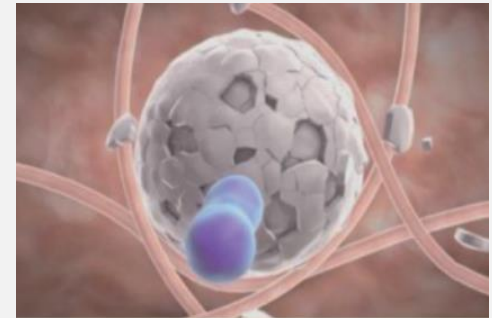


After injection,

It provides immediate volume and CaHA microspheres work as a scaffold and start to stimulate the tissues constantly to produce natural collagen



STEP 3



Over time,

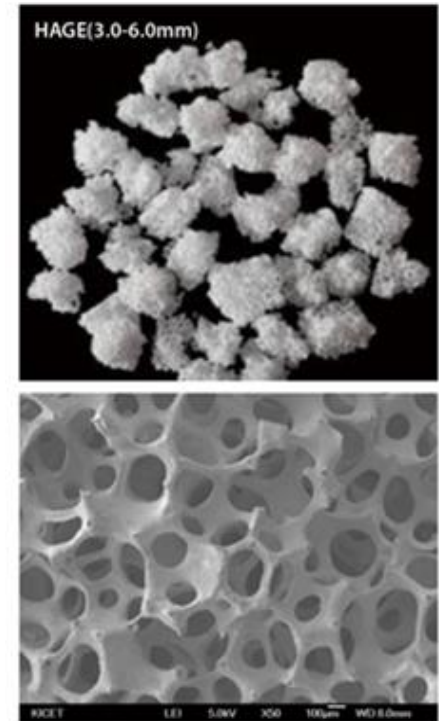
the gel carrier is absorbed and as the CaHA microspheres degrade, the newly formed collagen remains and improves skin elasticity, firmness and rejuvenation

Hydroxyapatite EXPERT

Started studying hydroxyapatite from 1995 before CGBIO (BioAlpha),
We succeeded in developing many apatite series products such as Novosis, rhBMP-2,
HA carrier and Bongros, HA bone chips for dental treatment and FACETEM, the
CaHA biostimulator.

From raw material synthesis to complete the product, FACETEM is developed
applying the knowledge and technology accumulated over a long period of time.

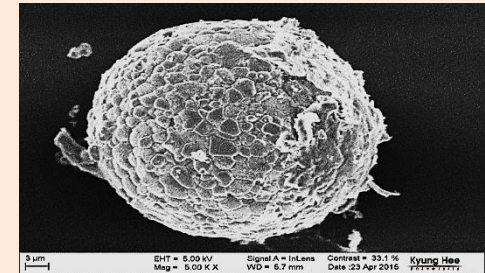
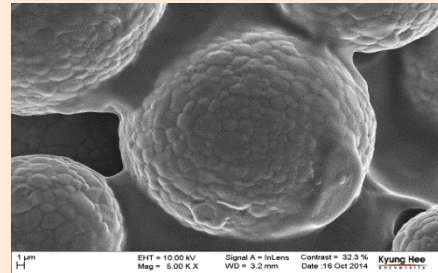
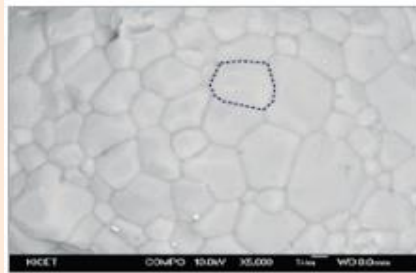
The **purity of law Hydroxyapatite is 99%.**



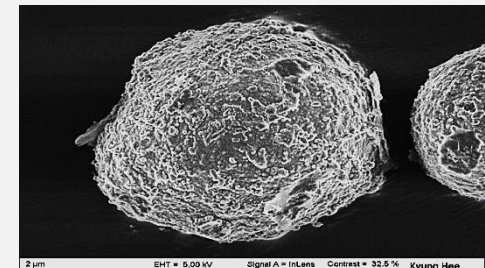
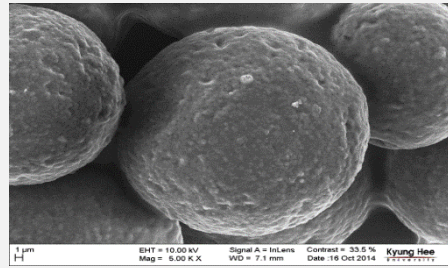
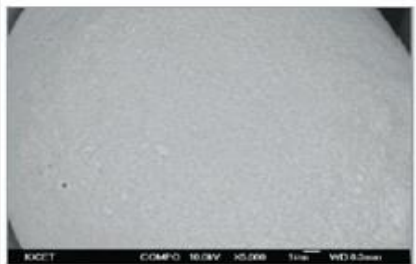
FACETEM, patented unique **Lattice-pore structure**

Hydroxyapatite microspheres in FACETEM degrade layer by layer and **prevent a sudden volume loss** through the application of a **unique patented lattice-pore structure**

FACETEM's
Lattice pore structure



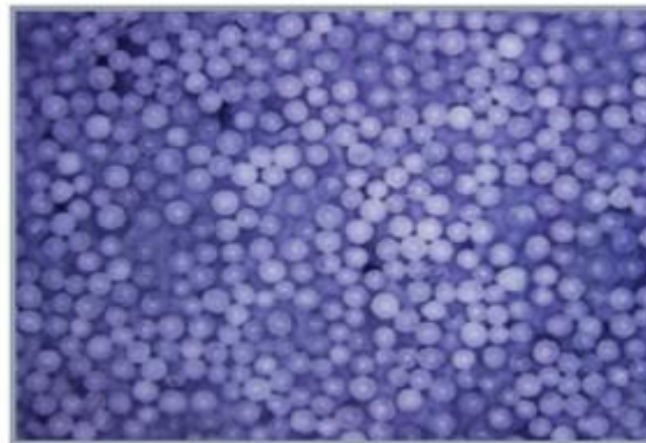
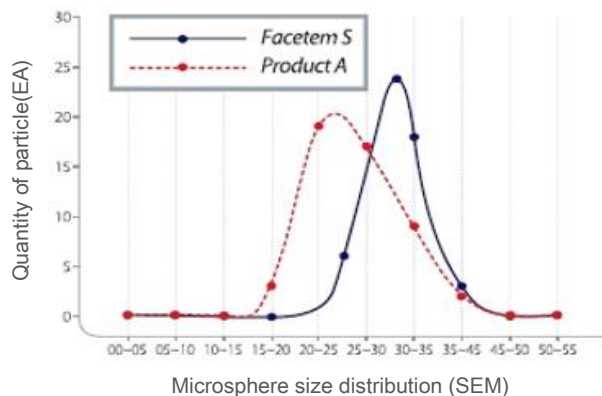
Product A's
Sand alike structure



FACETEM, Homogeneous Microsphere

By its **uniform Calcium hydroxyapatite beads size** with low tolerance and **a feature of not adhering each other**, FACETEM makes ideal collagen regeneration by evenly distributed microspheres, smooth injection (21N)

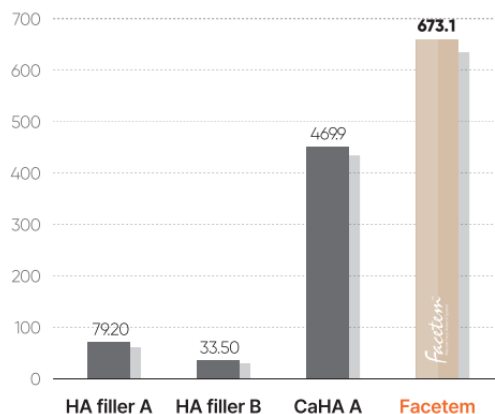
PRODUCT	SIZE RANGE	AVERAGE SIZE
FACETEM	25-40μm	30μm
Product A	15-40μm	25μm



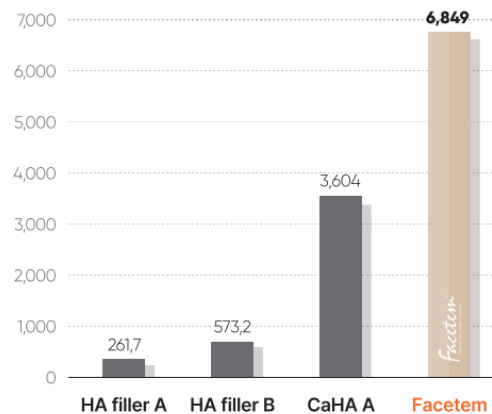
▲ FACETEM CaHA Microsphere
Particle morphology analysis using FE-Scanning electron microscopy

FACTEM, Superior visco-elasticity

By specialized manufacturing process, FACTEM has **outstanding viscosity and elasticity** compared to other products



Complex viscosity



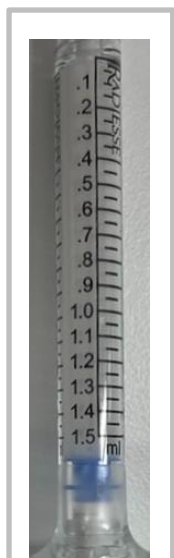
Shear viscosity

- Storage modulus (G'): elasticity . The energy stored in the material.
- Complex viscosity (η^*) : Composite action of viscosity and elasticity (G^*/ω)
- Shear viscosity (η) : ratio of shear stress o shear rate. Simply called viscosity

stainless steel plate
Oscillation mode, 0.1~10Hz
at 1 Hz Frequency, Temp. 25°C

FACETEM, CaHA sintering technology

CGBIO's advanced level of **Hydroxyapatite sintering technology** allows FACETEM to maintain a **true white color** without discoloration and it helps achieving a **skin brightening effect** when injected into the dermis layer



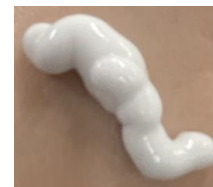
R* CaHA



H* CaHA+HA



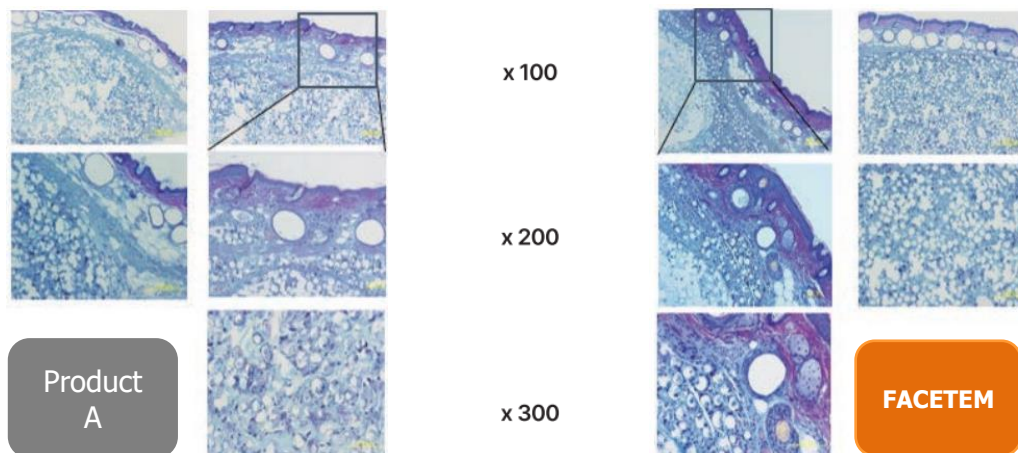
C* CaHA



FACTEM, CaHA snow white contents

FACETEM, Definite collagen regeneration effect

Facetem stimulates Collagen production and produces **more Collagen type I & type III** compared to Competitor CaHA product. Not only the volumizing and contouring, but Facetem works as strong biostimulator



Collagen Type I (Purple) & Type III (Blue) in In vivo 12weeks rat tests

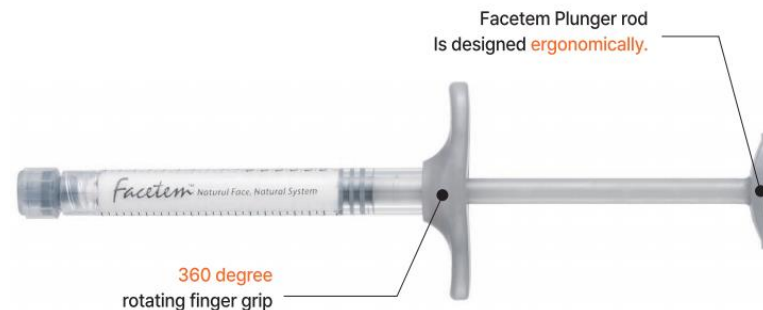
FACETEM, Specification

Facetem™
Natural Face, Natural System

Facetem
Natural Face, Natural System 0.8ml x 2



Facetem
Natural Face, Natural System 1.5ml x 1



FACETEM Specification

Concentration	Calcium Hydroxyapatite 30%
Gel Carrier	Polymer Gel 70% (Carboxymethyl Cellulose Sodium, Glycerin, WFI)
Microsphere Size	25 to 40 μm (Average 30 μm)
Package	0.8 cc x 2 syringes / box 1.5 cc x 1 syringe / box

THE END