

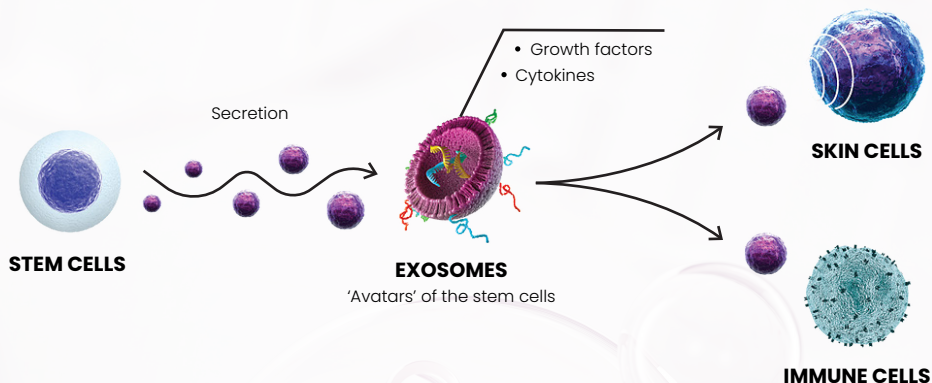


LYOPHILIZED EXOSOMES



THE NEW ERA OF
REGENERATIVE MEDICINE

SCIENCE AND TECHNOLOGY



WHAT ARE EXOSOMES?

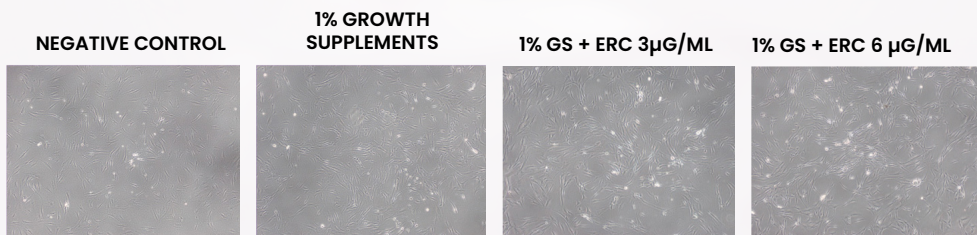
Cellgenic Lyophilized Exosomes treatments are based on the most cutting edge scientific biotech breakthrough for skin rejuvenation and regeneration. Exosomes are responsible for cell to cell communication and for facilitating the exchange of RNA and other important proteins between cells (e.g. fibroblasts, keratinocytes, immune cells, etc.), in addition to transferring numerous growth factors and cytokines and genetic materials that have shown signs of tissue repair and improving skin cells.

These data coding avatars have been harnessed for our new line of exosome products to promote a more radiant youthful appearance.

IN VITRO TESTING

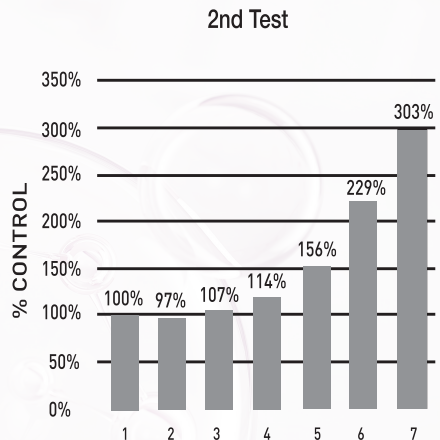
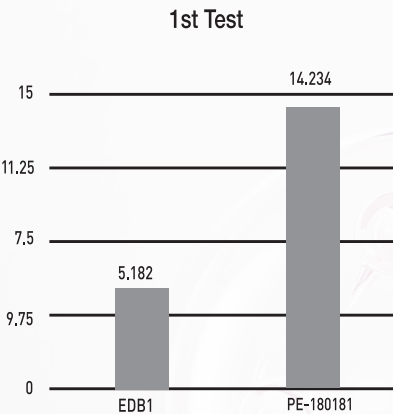
HUMAN FIBROBLAST CELL PROLIFERATION

Cellgenic Lyophilized Exosomes promotes skin cell proliferation by up to 80% in a dose-dependent manner. Cellgenic $3\mu\text{g/ml}$ 36.1% increase, Cellgenic $6\mu\text{g/ml}$ 84.0% increase, compared against positive control (1% GS).



ELASTIN INCREASE BY CELLGENIC

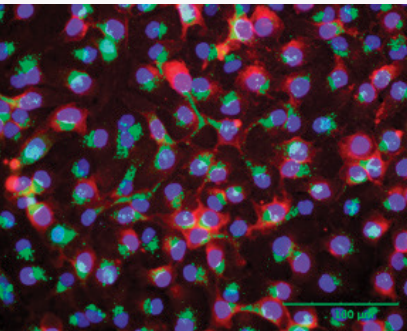
Cellgenic Lyophilized Exosomes may increase the elastin amount of human dermal fibroblasts up to 300# in vitro.



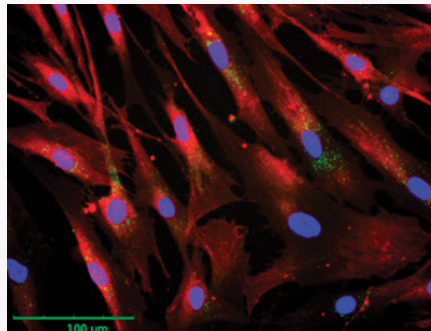
CELLULAR UPTAKE OF EXOSOMES

Human skin cells easily uptake Cellgenic Lyophilized Exosomes which means that stem cell-derived exosomes can message skin cells to “Do Something”.

HACAT HUMAN KERATINOCYTES



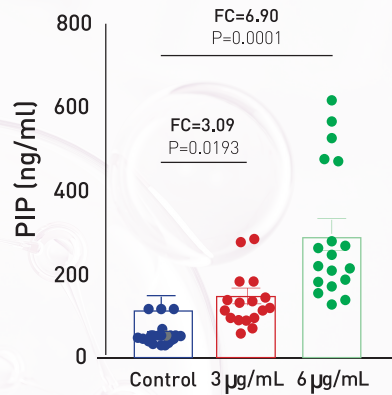
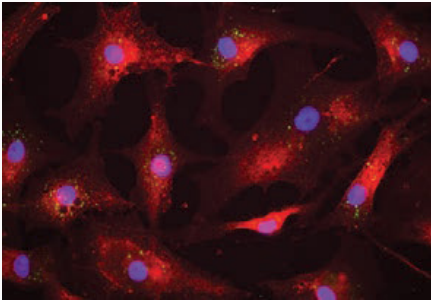
HDF HUMAN DERMAL FIBROBLAST



COLLAGEN INCREASE BY CELLGENIC

After delivery of Cellgenic Lyophilized Exosomes into fibroblasts, neocollagenesis can increase up to 6 folds.

CELLULAR UPTAKE OF EXOSOMES HUMAN DERMAL FIBROBLAST



IN VIVO TESTING

Exosomes are nano-sized vesicles (30-200 nm) constantly released by almost all cells. The ability of exosomes to travel between cells and deliver their cargo, which includes lipids, proteins, and nucleic acids, makes them an appealing cell-free therapy option to treat multiple diseases. Here, we investigated for the first time whether human adipose tissue-derived mesenchymal stem cell-derived exosomes can ameliorate atopic dermatitis (AD) in an in vivo mouse model. When injected either intravenously (IV) or subcutaneously (SC) into NC/Nga mice treated with house dust mite antigens, ERC-exosomes were found to reduce pathological symptoms such as clinical score, the levels of serum IgE, the number of eosinophils in blood, and the infiltration of mast cells, CD86+, and CD206+ cells in skin lesions. ERC-exosomes also significantly reduced mRNA expression of various inflammatory cytokines such as interleukin (IL)-4, IL-23, IL-31, and tumor necrosis factor (TNF-) in AD skin lesions of Nc/Nga mice. Taken together, these results suggest that ERC-exosomes can be a novel promising cell-free therapeutic modality for AD treatment. (Byoung Seung Cho, Jin Ock Kin, Dae Hyun Ha and Young Weon - Stem Cell Research Therapy)

CELLGENIC LYOPHILIZED EXOSOMES

LYOPHILIZED EXOSOMES & DILUENT



1 ST	Lyophilized Exosome	-----	20 mg
2 ND	Diluent	-----	5 ml

DIRECTIONS

1. Open carton, and combine 1 Vial of Diluent into 1 Vial of Lyophilized Exosome. Mix thoroughly.
2. Cleanse the area of application thoroughly and dry completely .
3. Apply exosome regenerative complex, using the entire vial. NOTE: Use immediately after mixing, not exceeding 3 hours.

STORAGE INSTRUCTION

- Store in a cool dry place at room temperature. It should not be exposed to temperatures above 37°C.
- The product is guaranteed effective for up to 24 months from the date of manufacture when stored under the appropriate conditions described in the first point.
- Once the vial is opened, the expiration date is no longer valid.

ADVANCED INGREDIENTS

Exosome	15 Growth Factor + Peptides	2 Vitamins
3 Humectants	19 Amino Acids	4 Coenzymes
		5 Minerals

LYOPHILIZED EXOSOME | 20 MG

EXOSOME

Umbilical cord mesenchymal cell exosomes.

GROWTH FACTORS + PEPTIDES

sh-Oligopeptide-1	sh-Polypeptide-62
sh-Oligopeptide-4	sh-Polypeptide-3
sh-Polypeptide-4	sh-Oligopeptide-2
sh-Polypeptide-9	Caffeoyl sh-Octapeptide-4
sh-Polypeptide-13	Copper Tripeptide-1
sh-Polypeptide-58	

COENZYMES

Thiamine Diphosphate
Coenzyme A
Nicotinamide Adenine Dinucleotide
Disodium Flavine Adenine Dinucleotide

AMINO ACIDS

Arginine	Methionine
Lysine HCl	Glutamine
Valine	Alanine
Histidine	Tryptophan
Leucine	Tyrosine
Isoleucine	Aspartic Acid
Phenylalanine	Glycine
Serine	Glutamic Acid
Threonine	Ornithine HCl
Proline	

HUMECTANT

Trehalose
Mannitol

VITAMIN

Biotin
Ascorbic Acid

MINERALS

Magnesium Sulfate
Potassium Chloride

Exosomes therapy is the latest treatment that is impressing doctors - many argue that exosomes may be more important than stem cells due to their unique ability to function as a “messenger” within the body, transferring information from cell to cell. Enhancing stem cell therapy with added exosomes is considered superior and optimal therapy.

DILUENT | 5 ML

GROWTH FACTORS + PEPTIDES

sh-Decapeptide-7
sh-Octapeptide-4
sh-Oligopeptide-9
sh-Pentapeptide-5

AMINO ACIDS

Alanine	Isoleucine
Arginine	Phenylalanine
Lysine HCl	Serine
Valine	Threonine
Histidine	Proline
Leucine	

HUMECTANT

Sodium Hyaluronate

MINERALS

Sodium Chloride
Disodium Phosphate
Sodium Phosphate
Potassium Chloride

Growth factors play a pivotal role in maintaining firmness and elasticity in your skin. Daily use of skin care products containing growth factors is known to help reduce the appearance of fine lines, wrinkles and improve skin tone and texture.



Clinical applications of Cellgenic Lyophilized Exosomes

(Only for topical, intradermal and intra-articular applications)



CLINICAL APPLICATIONS

Hair Therapy

The use of Cellgenic Lyophilized Exosomes as a hair loss treatment has shown prominent hair growth results in both men and women. It is highly recommended for patients who do not qualify for hair transplant surgery and for those in the early stages of the hair loss cycle.



Beauty / Skin care

Cellgenic's Lyophilized Exosomes and their components can help restore the contour and youthful shape of the face, as well as dramatically improve skin quality, firmness, and color irregularities caused by the aging process and sun exposure and to the environment.



Pain management

- Osteoarthritis
- Knee pain
- Shoulder
- Nerve pain
- Tendinitis, osteopathies
- Slow, non-healing wounds/burns

CLINICAL APPLICATIONS

Anti-aging effect

Exosomes have been used effectively to delay the onset of skin aging. They do this by encouraging the development of fibroblast cells, which are crucial for maintaining the skin's elasticity and strength. Exosomes are already used in facials at anti-aging clinics and in commercially available exosome-based moisturizers.



Wound care

Mesenchymal stem cell-derived exosomes can induce benefits at nearly all stages of wound healing, including control of immune responses, inhibition of inflammation, promotion of cell proliferation and angiogenesis, while reducing scar formation during the wound healing process.





WWW.CELGENIC.COM
+1 305 560 5337
INFO@STEMCELLSGROUP.COM