



SCC79TH ANNUAL

SCIENTIFIC
MEETING &
SHOWCASE

DECEMBER 16-17, 2025 | SHERATON NY TIMES SQUARE, NEW YORK



Bioyouth™-SPG Schizophyllan Gel--Triple-Helix β -Glucan Drives Immune Regulation, Repair-Anti-Aging & Biological Sunscreen

Bloomage Biotechnology Corporation Limited

bloomagebioactive.com

PRODUCT/SERVICE BACKGROUND INFORMATION

Bioyouth™-SPG is a schizophyllan gel using the unique *Schizophyllum commune* from the pristine forests of Yunnan as the fermentation strain. Through innovative fermentation technology, it produces an active β -glucan with a distinctive triple-helix structure, known as Schizophyllan. Bioyouth™-SPG not only forms a 3D water network to enhance the skin's physical barrier but also offers dual immunomodulation, soothing redness, improving the skin's microenvironment, and combating inflammaging for a healthier, more radiant complexion.

WHAT IS THE COMPANY INTRODUCING TO THE MARKET/INDUSTRY?

Bioyouth™-SPG is an active ingredient integrating four core effects: "immunomodulation + barrier repair + anti-aging + biological sunscreen". Different from traditional β -glucans, its triple-helix structure greatly enhances the binding ability with Dectin-1 receptors, significantly upregulating the expression of HBD-2 (β -defensin-2) and anti-inflammatory factor IL-10, while downregulating pro-inflammatory factor IL-1 α to achieve "controlled inflammation repair". The 3D hydration network can instantly reduce transepidermal water loss (TEWL) and relieve redness; its unique biological sunscreen effect can help enhance the skin's resistance to UV rays and reduce photo-induced damage.

HOW WILL THIS NEW PRODUCT/SERVICE IMPACT THE INDUSTRY (BENEFITS)?

Bioyouth™-SPG innovatively breaks through traditional β -glucan limitations: traditional β -glucans mostly only offer single effects like basic moisturizing and weak anti-inflammation, while this product, relying on its unique triple-helix active β -glucan structure, precisely regulates skin immune response and balances skin immune state at the root. It also skillfully integrates "barrier repair + anti-aging + protection" effects—not only repairing damaged barriers and fighting skin aging, but also providing protection, accurately meeting needs of segmented skin types such as inflammation-induced aging skin and sensitive skin.
