Antimicrobial peptide hBD-3 improves Th2 cytokine-mediated impairment of tight junction barrier through autophagy activation

Deletion of TNSAP6 gene in human keratinocytes by CRISPR/Cas9 edition demonstrates a role for TSG-6 to retain hyaluronan inside epidermis

Identification of a demesogl-1 reducing component of human stratum corneum contained in wild thyme (Thymus serpyllum) extract

Encapsulated Activated-Grape Seed Extract (ACTIVITIS®) inhibits demethylation of PPARα promoting anti-aging benefits and barrier repair for human skin

IL-4 and IL-13 cytokines drive sex steroid hormone synthesis and lipid abnormalities in sebocyte during atopic dermatitis pathogenesis

Type XVII collagen modulates epidermal patterning

Encapsulated Activated-Grape Seed Extract (ACTIVITIS®) inhibits demethylation of PPARα promoting anti-aging benefits and barrier repair for human skin

Cumulative oxidative stress and chronic inflammation are critical during skin aging. One pathway that regulates both processes involves Protein phosphatase 2A (PP2A), a serine/threonine phosphatase. Reversible methylation of the C-terminal leucine of the PP2A catalytic subunit (PP2Ac) plays a crucial role in regulating PP2A function. Oxidative stress has been previously shown to dramatically decrease methylation of the C-terminal leucine of the PP2A catalytic subunit (PP2Ac) in dermal fibroblasts. Previously, we developed a novel, proprietary grape seed extract called Activated-Grape Seed Extract, or ACTIVITIS® (INCI name: anticariogenic and hydroxylated p-hydroxycinnamidol) which is enriched for PP2A-activating flavonoids with increased potency in preventing PP2A demethylation when compared to non-encapsulated forms. To explore the potential benefits of encapsulated ACTIVITIS® demethylating activity with similar potency as the non-encapsulated form. To explore the potential benefits of encapsulated ACTIVITIS® demethylating activity with similar potency as the non-encapsulated form.