

Supplementary Figure S1

Baseline period
at week -4



GFF treatment
at week 4



Clinical photos for visible pores.
Visible pores in baseline period at week -4 and in GFF treatment at week 4 are shown.

Supplementary Figure S2

Baseline period
at week -4



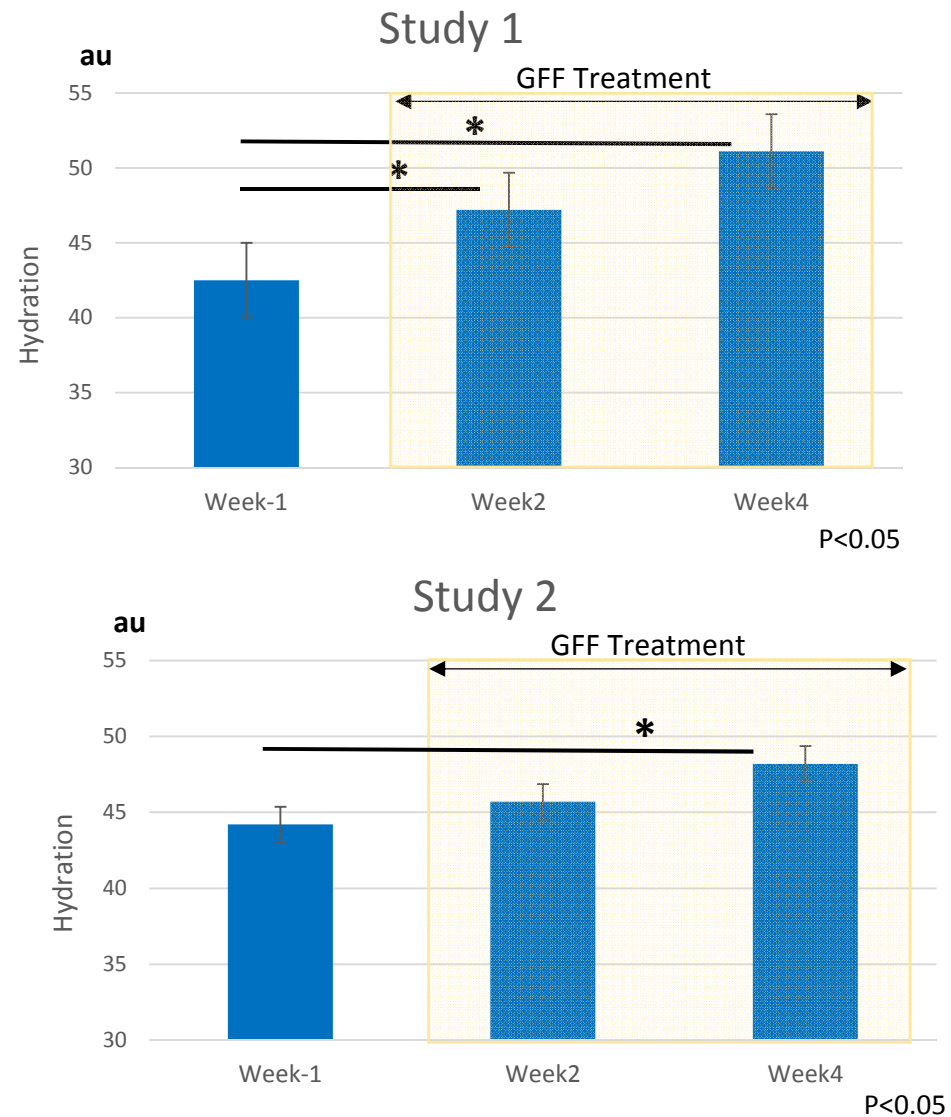
GFF treatment
at week 4



Clinical photos for redness.

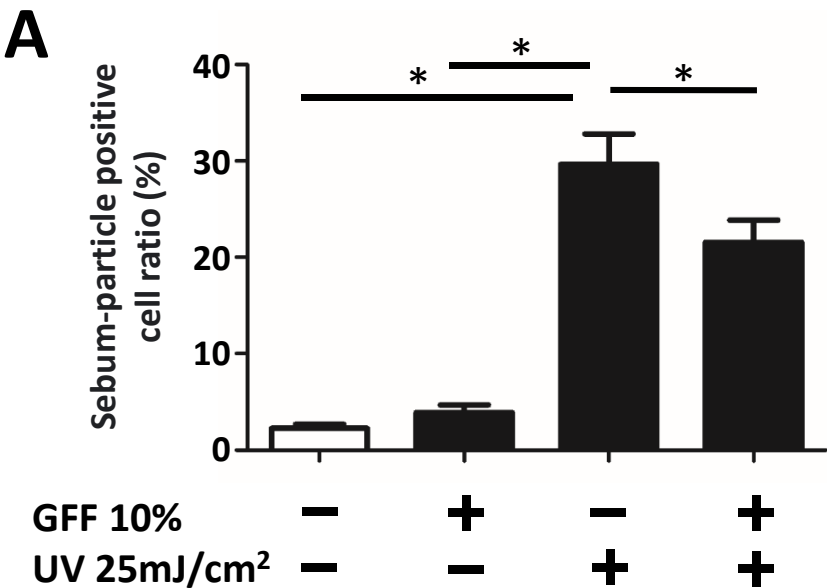
Clinical pictures of redness in baseline period at week -4 and in GFF treatment at week 4 are shown.

Supplementary Figure S3



GFF improves facial skin hydration.
Compared with baseline period at week -1, GFF treatment significantly upregulates facial skin hydration at week 2 and week 4 in study 1, and at week 4 in study 2, respectively.

Supplementary Figure S4

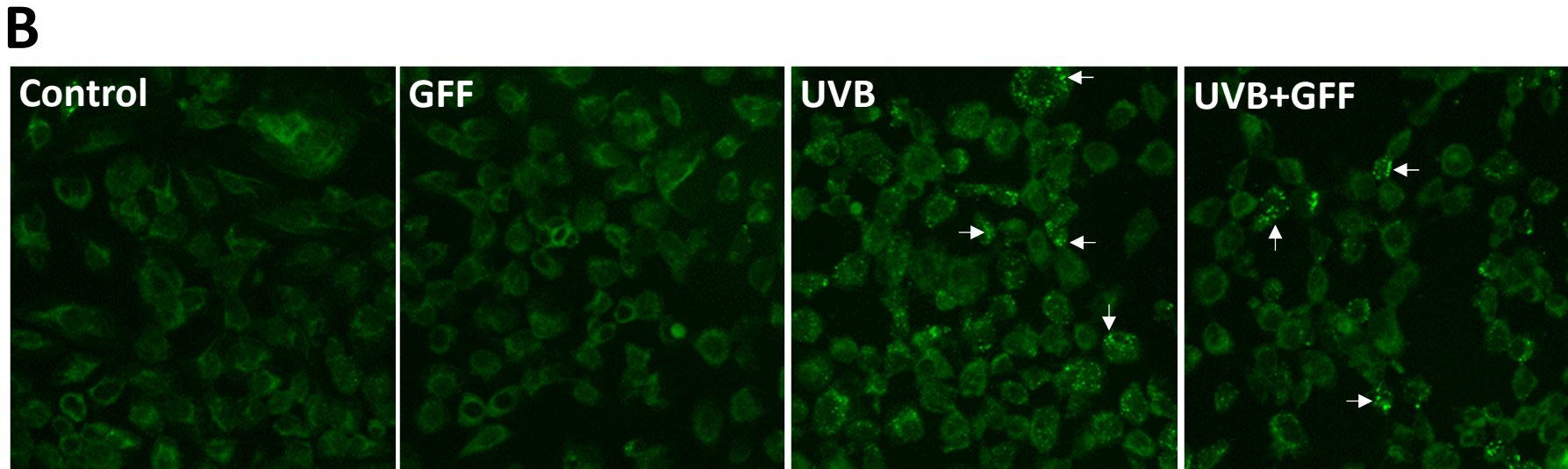


GFF inhibits UVB-induced sebum production by sebocytes.

SEB-1 cells (cultured sebocytes) were treated with or without ultraviolet ray B (UVB) irradiation (25mJ/cm²) in the presence or absence of *Galactomyces* ferment filtrate (GFF, 10%) obtained from P&G Godo Kabusikigaisha. After 24 hrs incubation, sebum production of sebocytes was visualized using an Adipocyte Fluorescence Staining Kit (Cosmo Bio Co., Ltd., Tokyo, Japan).

A: UVB irradiation significantly increased the sebum-particle positive cell ratio compared with non-irradiated control, which was significantly decreased in the combinatory treatment with UVB and GFF.

B: Representative photographs for sebum production. Sebum particles were visualized by fluorescence technique (white arrows).



Supplementary Table S1

Net values of pore area, roughness and redness

eMR Study 1	Pore Area	Roughness	Redness
Morning after wake-up	40.10 (3.829)	70.20 (2.202)	59.94 (4.626)
Morning after face wash	34.00 (3.771)	67.86 (2.213)	60.96 (4.738)
Evening after face wash	33.81 (3.605)	68.57 (2.193)	66.86 (4.927)
eMR Study 2	Pore Area	Roughness	Redness
Morning after wake-up	39.19 (3.978)	69.55 (2.741)	58.52 (4.513)
Morning after face wash	33.72 (3.396)	66.18 (2.478)	60.28 (4.045)
Evening after face wash	32.67 (3.510)	67.01 (2.473)	65.72 (4.051)

Facial pore area, roughness and redness are evaluated by eMR Pro calculation software. In baseline period at week -4 to week -1, pore area and roughness were largest in the morning after wake-up. Redness was largest in the evening after face wash. Each value (a.u.) is expressed with mean and (standard deviation).