

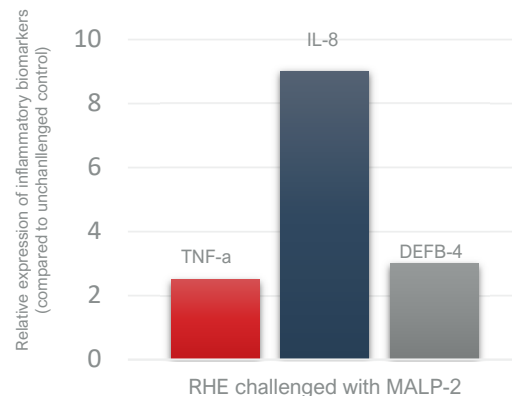
# ACUTE INFLAMMATION:



**Acute inflammation** in the skin is a response of the immune system to various triggers. In the skin, inflammation can occur following infection, sun-burn, allergen or contact with irritant. Compared to long-lasting chronic inflammation, this short-term immune response aims to rapidly counteract the source of dysfunction. Multiple cytokines and chemokines have been long described as relevant signatures of anti-inflammatory treatments. Based on those inflammatory biomarkers, StratiCELL has developed a range of assays to study the protective effects of compounds against acute inflammation induced by specific triggers such as UV radiation, TNF-alpha, phorbol myristate acetate (PMA), bacterial lipopolysaccharides (LPS) or lipopeptides (MALP-2).

<b>Description</b>	Replicates acute inflammation induced by specific triggers such as UV radiation, TNF-alpha, phorbol myristate acetate (PMA), bacterial lipopolysaccharides (LPS) or lipopeptides (MALP-2).					
<b>Skin model*</b>	NHEK	NHEK	NHDF	THP-1	RHE	NHEK
<b>Inflammatory challenge</b>	TNF- $\alpha$	PMA	LPS	LPS	MALP-2	UV-A
<b>Positive reference</b>	Ibuprofen	Dexamethasone Ibuprofen	Ibuprofen	Dexamethasone	Oxidized lipoproteins	Dexamethasone
<b>Endpoints</b>	Expression and quantification of <b>inflammatory biomarkers</b> by RT-qPCR and ELISA, respectively					
	CXCL-5, MCP-1	IL-1- $\alpha$ , IL-6, IL-8, TNF- $\alpha$	IL-6, IL-8, CXCL-5, MCP-1	IL1- $\alpha$ , IL-6, IL-8, TNF- $\alpha$	IL-8, TNF- $\alpha$ , HBD2/DEFB4	IL1- $\alpha$ , IL-6, IL-8, TNF- $\alpha$ , PGE2

**Expression of inflammatory biomarkers by RT-qPCR**



**Quantification of inflammatory biomarkers by ELISA**

