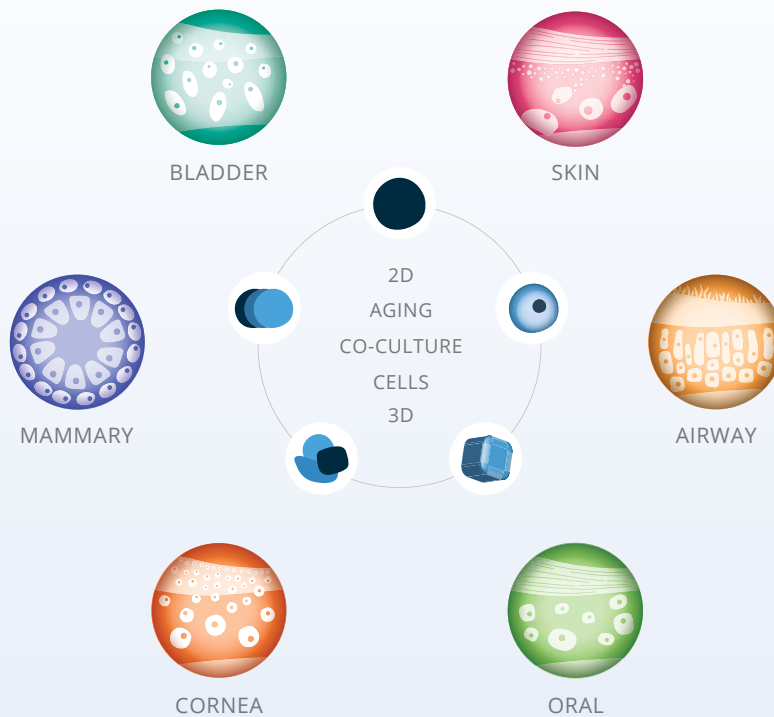




CELLnTEC
ADVANCED CELL SYSTEMS

Epithelia In Vitro. Its All We Do.

VitroAge. Natural Aging In Vitro.



Age keratinocytes naturally in vitro over 3 weeks

No peroxide or aging chemicals required

A range of age-related changes - quantifiable with proteomics



Swiss Quality Products



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Chronic Aging with VitroAge

Natural aging in vitro

VitroAge Keratinocyte Aging Medium **CnT-AG2**

Traditional culture media have evolved over 50 years to provide strong proliferation for extended periods. They contain many protective and stimulatory factors and nutrients, that exert a powerful anti-aging effect.

The new VitroAge medium (CnT-AG2) lacks these protective elements. Keratinocytes age naturally in this medium over a period of several weeks, without the need for acute doses of oxidizers or other synthetic pro-aging chemicals.

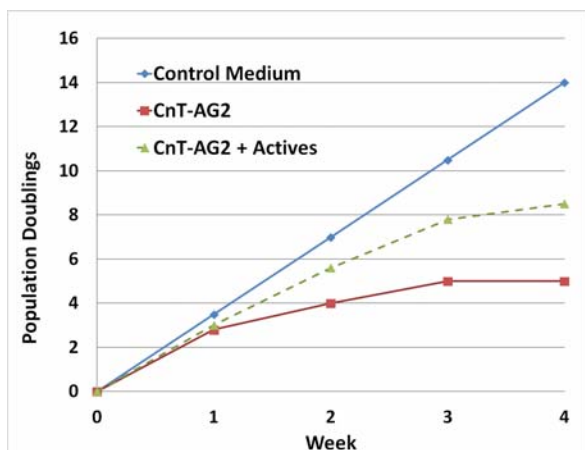
The VitroAge epidermal model maintains normal cell morphology, but generates several well documented in vivo signs of ageing including reduced lifespan and disrupted metabolism.

Signs of Chronic Aging In Vitro

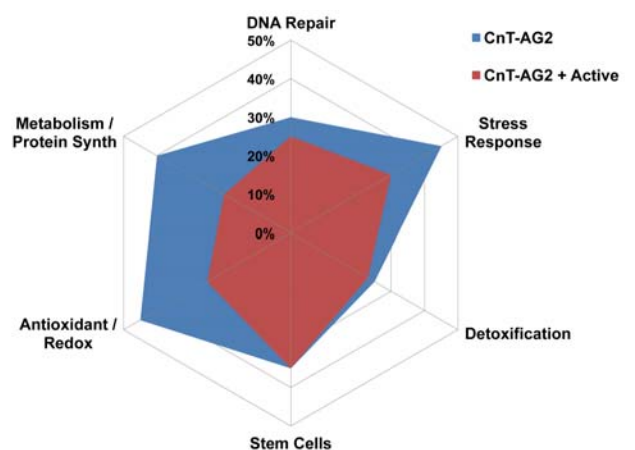
Keratinocytes aged in the VitroAge medium for 3 weeks display a range of age-related changes also found in vivo.

Key changes include progressive loss of proliferative function, disrupted metabolism, and protein oxidation.

Keratinocytes aged in VitroAge medium have also been evaluated using MRM proteomics to quantify 100 proteins in parallel. More specific info can be found on our website.



Keratinocytes aged over 4 weeks in CnT-AG2 cycle progressively more slowly, and then reach senescence.



Changes in protein expression of 6 groups of proteins after 3 weeks of aging, with and without an active ingredient. Taken from an evaluation of 100 proteins done with MRM proteomics.

Did you know... Basal keratinocytes aged in vivo cycle more slowly and fewer times prior to committing to differentiation than young transient amplifying cells (Charruyer et al, JID, 2009).