

Role of mitochondria in skin senescence

Shigeru Yanagi

Tokyo University of Pharmacy and Life Sciences

We previously identified a mitochondrial ubiquitin ligase MITOL, whose dysfunction causes production of reactive oxygen species from mitochondria. Here, we generated keratinocyte-specific MITOL-deficient mice and examined the relationship between MITOL and ageing. Interestingly, MITOL-deficient mice revealed typical senescence-associated skin phenotypes. Our results provide novel insight into how mitochondrial function controls ageing.