1. Summary

This study showed that

- Compared with control, the test substance significantly increased the SOD-like activity rate.
- Compared with control, the test substance significantly increased the OH radical scavenging rate.
- Compared with control, the test substance significantly increased the lipid peroxide production inhibition rate.

, suggesting that SHAMPOO BAR H2 ingredient MgH2 is useful as an antioxidant.

3. Experimental design

Reactive oxygen species are known to mediate, for instance, skin aging or dryness, spots, wrinkles, resilience/elasticity reduction, dullness, and rough skin. As a counter-measure, it is thus important to scavenge reactive oxygen species. In this test, evaluated were: whether the test substance scavenged super oxide anions（O_2-）, which are known to be produced in an early stage of inflammation and metabolism after UV irradiation and hydroxy radicals（•OH）, which are called reactive oxygen having very high reactivity; whether the test substance inhibited production of lipid peroxide (LOOH), which can be generated after skin lipid oxidation. In this way, the antioxidant capacity of the test substance was

evaluated extensively.