

〈原 著〉

健全な顔面皮膚より分離した *Staphylococcus haemolyticus* が
産生する *Propionibacterium acnes* に対する抗菌物質について

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**Inhibitory Substance against *Propionibacterium acnes* Produced
by *Staphylococcus haemolyticus* Isolated from a Healthy Face Skin**

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Abstract

We have isolated a *Staphylococcus haemolyticus* strain YIT6025 from a healthy human face skin which secretes an inhibitory substance to growth of *Propionibacterium acnes*-1.

This *Staphylococcus* strain produces maximally the inhibitory substance at an early stationary phase during growth and subsequently decrease its production. The inhibitory substance remains fully active after heat treatment but is inactivated by proteinase K treatment.

The activity is unstable in alkaline conditions and distinctively stable in acids.

We have partially purified this inhibitory substance from a filtrate of *S. haemolyticus* YIT 6025 culture by gel filtration through Sephadex G-50 column and further by CM-Cellulose chromatography. The resulting material is about 600 fold active based on absorption at 280nm.

Thus, the inhibitory substance seems to be heat-insensitive and alkali-labile protein(s) of molecular weight between 10,000 and 20,000.

Key words: Skin flora, *Staphylococcus haemolyticus*, *Propionibacterium acnes*, Inhibitory substance, Chromatography