

## The application of collagen from deep sea animals to cosmetic vehicle

**Kohsuke Adachi**

*Kochi University*

A partial length cDNA of the Type I procollagen  $\alpha 1$  helical was determined using cDNA from muscle of deep sea fish *Coryphaenoides yaquinae*. The helical region was composed of Gly-X-Y repeats; the conserved triplets within the same molecule in higher vertebrates. The number Ser residues in the helix were quite high compared to other vertebrates including fish.

The amino acid composition of purified Type I collagen from *Coryphaenoides acrolepis* shows also high contents of Ser residues among other fishes. These facts indicate that Ser is a key amino acid in Type I collagen in deep sea adaptation such as high pressure, low temperature and etc.