

# Searching for the naturally derived peptides having a skin whitening effect and elucidation of its action mechanism

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Tyrosinase is a rate-limiting enzyme in melanin biosynthesis. Thus, many inhibitors against tyrosinase have been proposed to be skin-lightening agents. However, many of the existing inhibitors cannot be widely used in the cosmetic industry owing to their high cytotoxicity and low activity. In this study, we isolated new naturally derived peptides from the enzymatic hydrolysate of rice bran protein that exhibited inhibitory activity against tyrosinase. Furthermore, mutational and structural analyses were tried for elucidating the structure-function relationship of these peptides.