

Enzymatic hydrolysate of milk proteins

The present invention relates to a mixture of soluble hydrophobic peptides of an enzymatic hydrolysate of milk having skin hydrating properties and percutaneous absorption levels of 4 to 5%. The mixture also exhibits wound healing properties but does not have the allergenicity of the milk-protein.

One fraction of the mixture is capable of increasing in vitro the growth rate of cell-cultured keratinocytes by at least 50%. The soluble peptides of the fraction have a molecular weight of about 900 daltons ranging from 200 to 1400 daltons, and an average hydrophobicity of 11 Kcal/mole. The soluble peptides are constituted of 66% hydrophobic amino acids and 17% aromatic amino acids, and have aromatic amino acids and other hydrophobic amino acids located at the C- and N-terminal ending in proportion over 85%.

Another fraction is capable of increasing the growth rate of cell-cultured fibroblasts by 37% and the production of collagen by 73%. The soluble hydrophobic peptides of the fraction have a molecular weight of about 2000 daltons ranging from 1400 to 2600 daltons.

The hydrolysate and peptides of the present invention can be formulated in cosmetic composition, in skin cell culture medium and in wound healing composition.
