

Supplementary Materials:

Milk Protein-derived Antioxidant Tetrapeptides as Potential Hypopigmenting Agents

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Table S1. Purity of peptides

Peptide	HPLC Purity (%)	Peptide	HPLC Purity (%)
YFYPEL family		MHIRL family	
YFYPEL	90	MHIRL	89
YFYF	>99	MHIR	95
FYPE	>99	HIRL	93
YPEL	>99	WYSLAMAA family	
YVEEL family		WYSLAMAA	90
YVEEL	90	WYSL	91
YVEE	>99	YSLA	98
VEEL	90	SLAM	87
YVEL	>99	LAMA	97
		AMAA	92

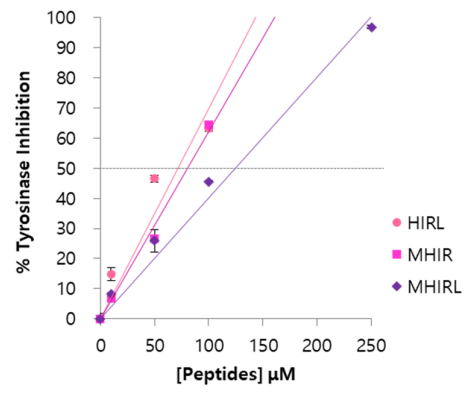


Figure S1. Determination of IC₅₀ values of MHIRL peptide family.

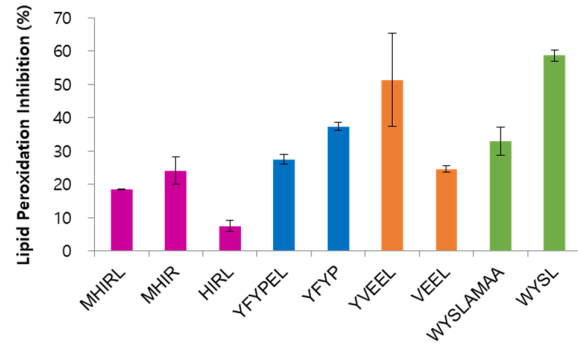


Figure S2. Lipid peroxidation inhibition (%) of antioxidant peptides.

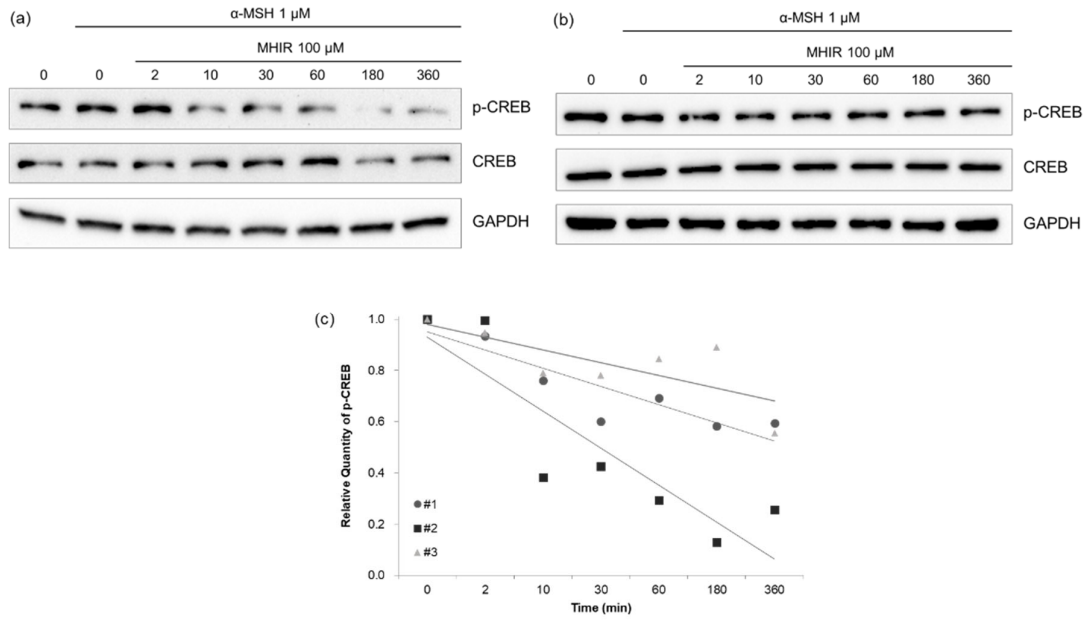


Figure S3. Effects of the MHIR peptide on melanogenesis-related signaling. The graph (a) and (b) show data from three independent experiments. The CREB phosphorylation was reduced in a time-dependent manner, but was not statistically significant. The graph (c) show all data from three independent experiments (The legend means the each experimental set 1, 2, and 3).