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# Afamelanotide

National Cancer Institute

## Source

National Cancer Institute. *Afamelanotide*. NCI Thesaurus. Code C82655.

A synthetic peptide analogue of the naturally occurring alpha-melanocyte stimulating hormone (α-MSH) with potential photoprotective activity. Mimicking the action of α-MSH, afamelanotide stimulates melanocytes to increase the production and release of melanin. Increased melanocyte melanin may protect against ultraviolet radiation (UVR)-initiated cellular DNA damage, oxidation of membrane proteins, and alterations in intracellular signaling processes in epidermal cells. Endogenously, α-MSH is released by skin cells in response to UVR exposure, stimulating melanocytes to produce and release melanin.