

Purification of melanogenic inhibitor

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Using antibodies that recognize either tyrosinase, tyrosinase-related protein 1 (TRP1), or tyrosinase-related protein-2 (TRP2, DOP Achrome tautomerase), the quantities of those melanogenic enzymes were analyzed in five melanoma cell lines that possess various degrees of melanin production. There was a positive correlation between quantities and synthetic rates of those melanogenic enzymes and their melanin formation. Surprisingly, pigmented cells showed higher levels of melanogenic inhibitors activity. These results clearly suggest that melanin production is regulated by a subtle balance between the activities of these enzymes and other factors such as the melanogenic inhibitor.