

Hair Protein Polymorphism and Its Application to Forensic Science Hair Comparison

REFERENCE: Miyake B, Seta S: Hair Protein Polymorphism and Its Application to Forensic Hair Comparisons; *Forensic Sci Rev* 2:25; 1990.

ABSTRACT: Hair protein is keratin, a hard protein which is naturally insoluble and resistant to attack by proteolytic enzymes. Keratin exhibits a lot of heterogeneity when it is reduced at the disulfide cross linkages. This nature of heterogeneity can provide forensic scientists who are engaged in hair comparison with information concerning species identification as well as individual discrimination. In this review the hair protein variation based on genetic or acquired origin are discussed critically with special reference to forensic hair comparison.

KEY WORD: Forensic hair comparison, solubilized hair protein, high-sulfur protein, low-sulfur protein, polymorphism, electrophoresis