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Fibre Keratins

Produced for the CRC for Premium Quality Wool undergraduate program by;
Dr. Janelle Hocking Edwards, The University of Western Australia.



Keratins of hair

- **Keratin is the major component of the cortex**
 - **Major fibrous protein**
 - other fibrous proteins include collagen, elastin, myosin
 - **member of the mammalian hard alpha-keratins family**

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Some important fibre protein definitions

- **Intermediate filaments (IFs)**
 - **Alternative name = Microfibrils**
 - IFs coil into a helical formation
 - cross-linked by S-S bonds and H-H bonds
- **Intermediate filament associated proteins (IFAPs)**
 - **Alternative name = matrix**
 - = keratin associated protein (KAP)
 - surrounds IFs

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Keratin proteins

- **Low-sulphur proteins**
 - Make up the IFs
- **Cysteine rich proteins**
 - High-sulfur proteins
 - form part of matrix
- **Tyrosine/glycine rich proteins**
 - High-glycine/tyrosine proteins (HGT)
 - also form part of matrix

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