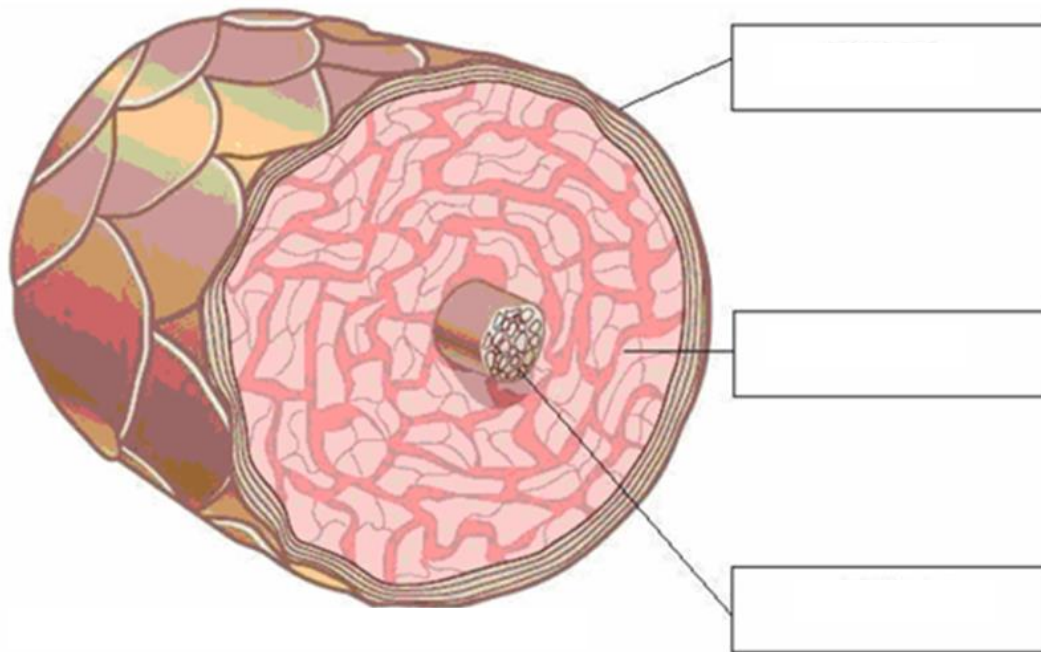


## Hair Structure

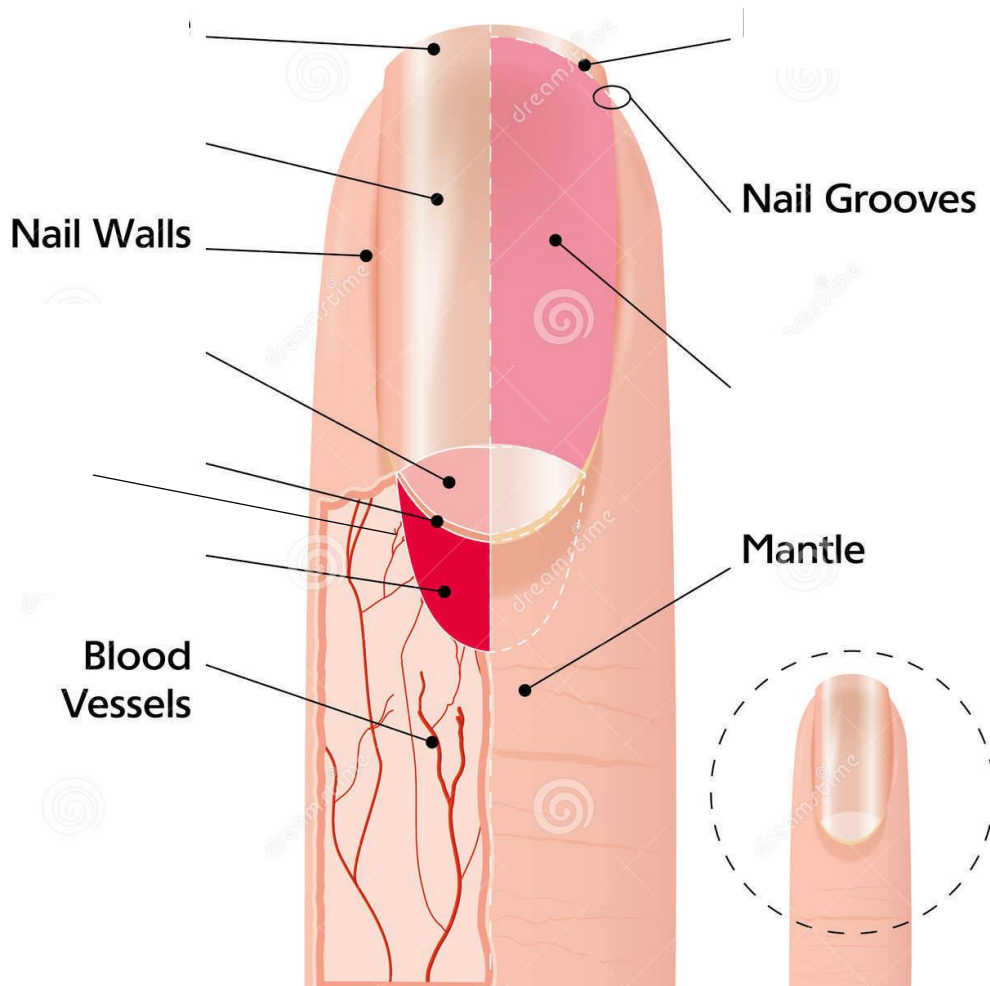
Read the descriptions and label.



<b>Hair structure</b>	<b>Purpose</b>
Cuticle	Outer layer of the hair, protects the cortex
Cortex	Provides the hair's strength, determines the hair colour and texture
Medulla	Inner most layer, not always present

## Nail Structure

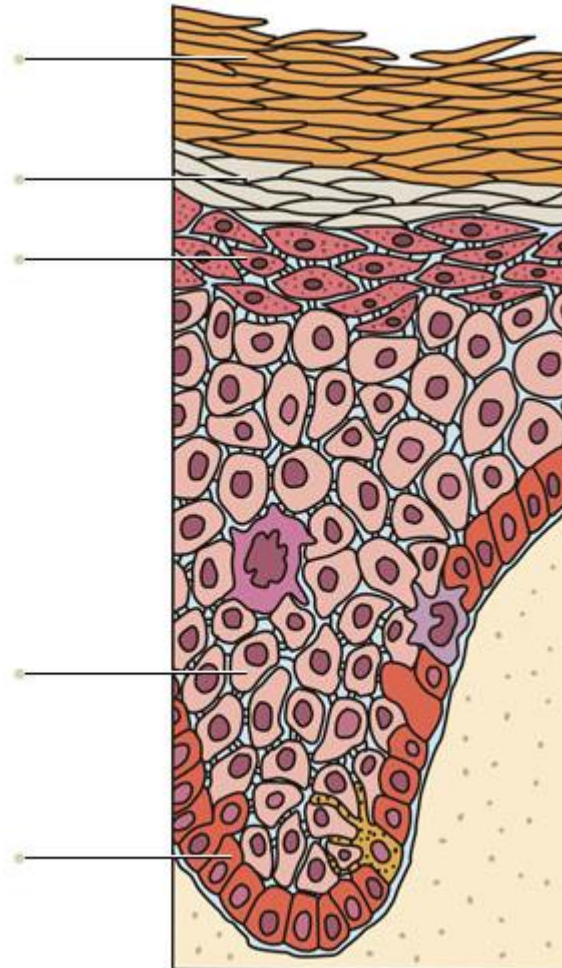
Read the descriptions and label.



Nail structure	Purpose
Nail plate	Protects the nail bed
Nail bed	Provides the blood supply
Nail cuticle	Protects the matrix from bacteria
Matrix	Responsible for producing cells that become nail plate
Lunula	Protects fingertips
Hyponychium	Works as a seal to protect the nail bed
Free edge	Protects fingertips
Nerve endings	Provides sensations

## Epidermis Structure

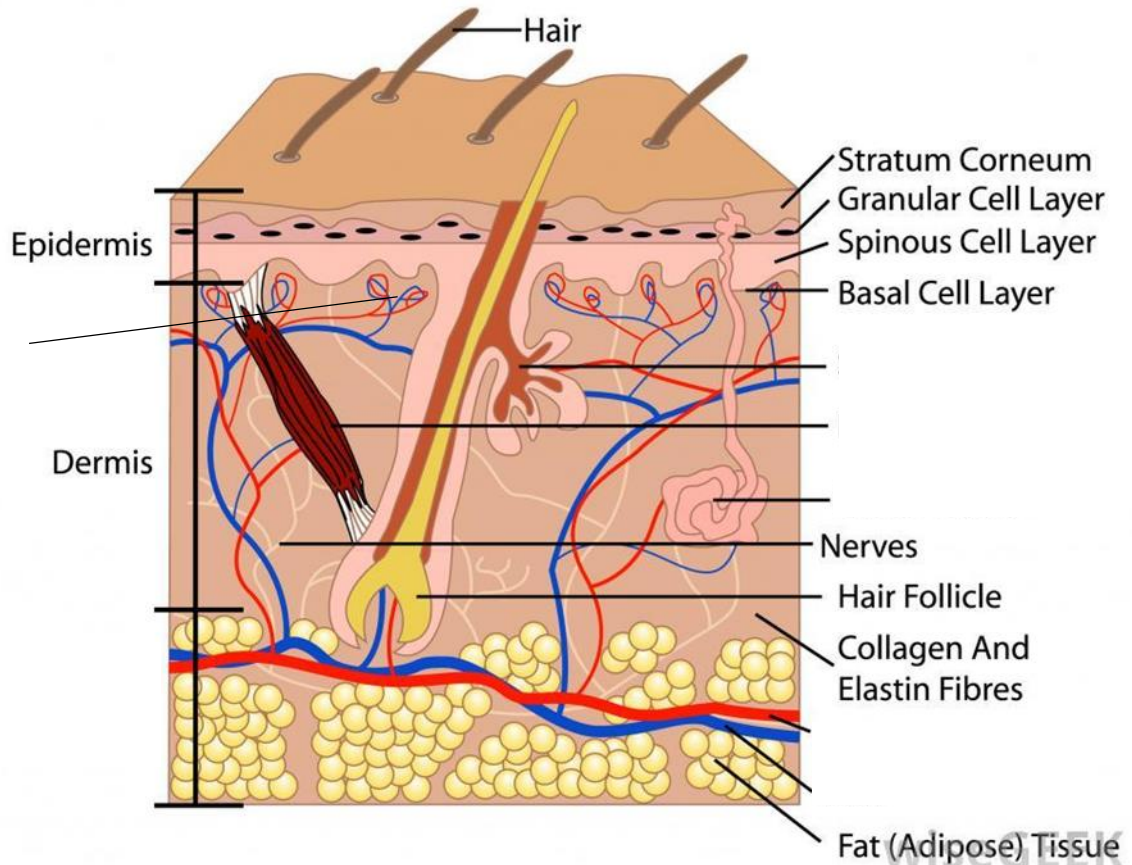
Read the descriptions and label.



Epidermis structure	Purpose
Basal cell layer	Bottom layer of cells in the epidermis, attaches to the dermis, where cells reproduce by mitosis
Prickle cell layer	Layer above the basal cell layer, where keratin is produced and injected into cells
Granular layer	Layer above the prickle cell layer, where keratinisation takes place
Clear layer	Layer above the granular layer forming a waterproof barrier
Horny layer	Outer layer of the epidermis made of dead, flat, keratinised cells which are shedding and helping to prevent dehydration

## Dermis Structure

Read the descriptions and label.



Dermis structures	Purpose
Collagen	Structural protein fibres that add strength and support to the dermis
Subcutaneous layer	Made up of fat cells for protection
Elastin	Elastic protein fibres that allow the skin to stretch and recoil, providing the skin's elasticity
Sweat glands	Excretes watery substances onto the skin's surface
Sensory nerve endings	End organs for pain, touch, heat, cold and pressure sensations
Sebaceous gland	Attached to the hair follicles producing sebum
Arrector pili muscle	Reacts to cold and heat, traps warm air to the body keeping in heat
Blood vessels	Provides nutrients to the skin and regulates body temperature
Dermal papilla	Contains nerve endings and blood capillaries to help nourish the hair