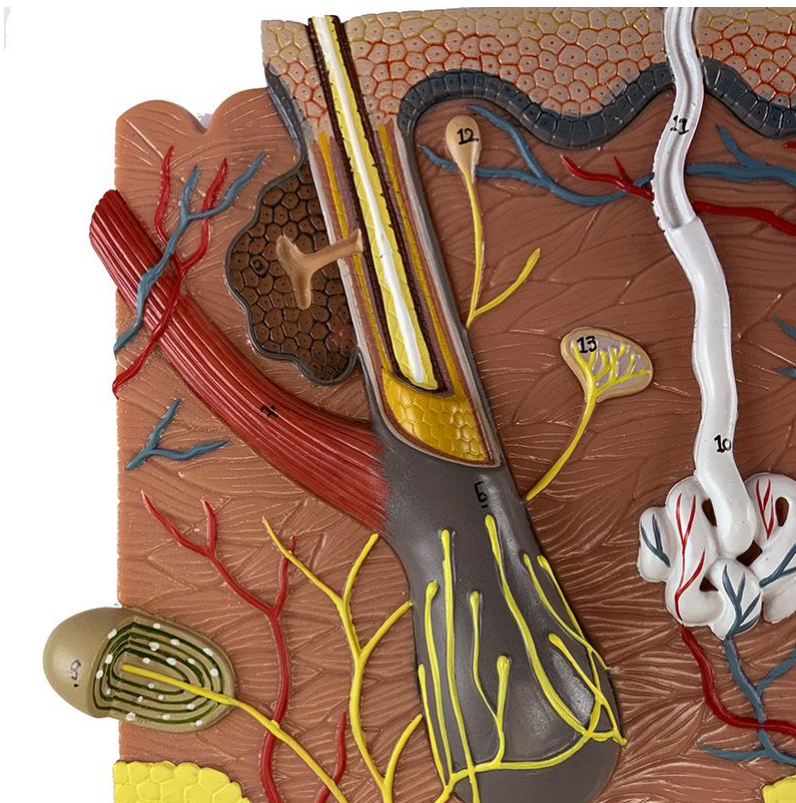
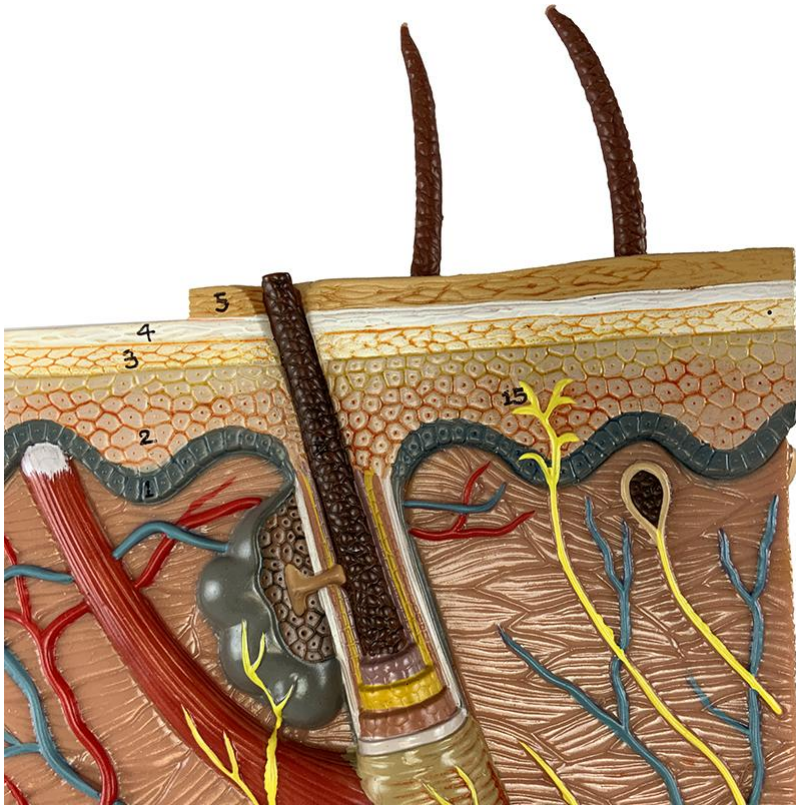
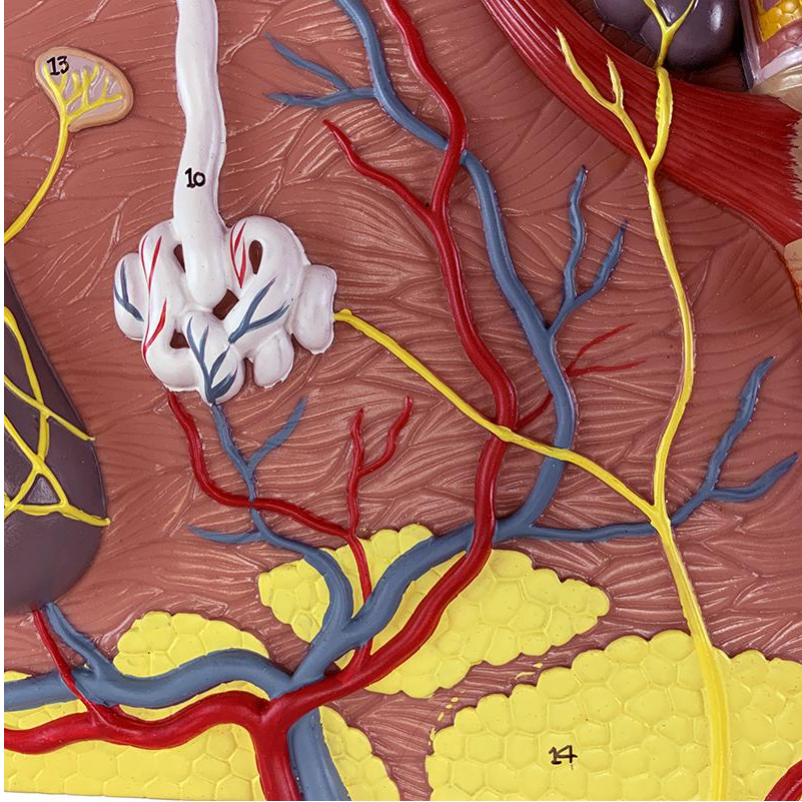




MG21893 | HUMAN SKIN SECTION MODEL, 70 TIMES ENLARGED









This anatomical relief model, magnified 70 times, offers a detailed comparison between skin sections with and without hair. It presents the essential anatomical structures, such as sensory corpuscles, hair follicles, sebaceous and sweat glands, numbered for easy identification.

Applications:

Ideal for detailed study of skin anatomy, comparisons between different skin areas (with and without hair), and for teaching structures such as sensory corpuscles, hair follicles, sebaceous glands, and sweat glands. A valuable tool for students and professionals to deepen their knowledge of anatomy, physiology, and pathophysiology.

Technical Differentiators:

- * Detailed representation of anatomical structures.
- * 70x magnification of natural size.
- * Numbered structures for easy identification.
- * Made of durable synthetic material.
- * Mounted on a robust polymer base with support.

3D Technology and Augmented Reality:

Our anatomical models offer an innovative visual complement through informative cards that activate 3D models viewable in augmented reality (AR). This exclusive interactive platform



stimulates learning, allowing comparative analysis of anatomical structures and offering opportunities for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: Magnified 70 times
- * Material: Durable synthetic material
- * Base: Robust polymer with support
- * Numbering: Numbered structures

Main Structures:

Basal layer: The basal layer, also known as the stratum basale or germinativum, is the deepest layer of the epidermis. It is composed of a single layer of cuboidal or columnar cells, including keratinocytes (keratin-producing cells) and melanocytes (melanin-producing cells). The basal layer is responsible for the cellular renewal of the epidermis, as its cells divide to replenish the cells of the upper layers.

Spinosum layer: The spinosum layer, or stratum spinosum, is a layer of the epidermis located between the basal layer and the granulosum layer. The cells of this layer, called spinous keratinocytes, are joined by desmosomes, which give a "spiny" appearance when observed under a microscope. The spinosum layer contributes to the resistance and flexibility of the skin.

Granulosum layer: The granulosum layer, or stratum granulosum, is a layer of the epidermis located between the spinosum layer and the corneum layer (or lucidum layer, in areas of thick skin). The cells of this layer contain granules of keratohyalin, which are precursors of keratin. The granulosum layer plays an important role in waterproofing the skin, helping to prevent water loss.

Corneum layer: The corneum layer, or stratum corneum, is the outermost layer of the epidermis and is composed of dead, keratinized cells called corneocytes. This layer is impermeable and protects the deeper layers of the skin against physical, chemical, and biological damage. The corneum layer is constantly renewed, with the superficial cells being desquamated (exfoliated).

Lucidum layer: The lucidum layer is a thin, translucent layer of the epidermis found only in areas of thick skin, such as the palms of the hands and the soles of the feet. It is located between the granulosum layer and the corneum layer. The cells of the lucidum layer are flattened and contain eleidin, a form of keratin.

Free nerve ending: Free nerve endings are sensory receptors found throughout the skin and other tissues of the body. They are responsible for detecting sensations such as pain, temperature, itching, and light pressure. Unlike other sensory receptors, free nerve endings



are not encapsulated by specialized structures.

Hypodermis: The hypodermis, also known as subcutaneous tissue, is the deepest layer of the skin, located below the dermis. It is mainly composed of adipose tissue (fat) and connective tissue. The hypodermis acts as thermal insulation, energy reserve, and shock absorber, in addition to containing blood vessels and nerves that irrigate and innervate the skin.

Sweat gland: Sweat glands are exocrine glands found in the dermis and responsible for producing sweat. There are two main types of sweat glands: eccrine and apocrine. Eccrine glands are present throughout the skin and produce a watery sweat to regulate body temperature. Apocrine glands are located in areas such as the armpits and genital region and produce a thicker sweat that contains pheromones.

Sweat duct: The sweat duct is the channel that carries sweat produced by the sweat glands to the surface of the skin. The sweat duct passes through the dermis and epidermis, opening into a pore on the surface of the skin.

Ruffini corpuscle: Ruffini corpuscles are sensory receptors found in the dermis and joints. They are responsible for detecting sustained pressure and stretching of the skin, as well as playing a role in proprioception (the perception of the body's position in space).

Other structures can be verified directly on the physical piece or in the interactive 3D model.

Customizable Skin Tones:

This anatomical model offers the option of choosing between three skin tones to better represent human diversity and meet different educational and clinical needs. It is possible to choose between light skin, intermediate tone, and dark skin, providing greater realism and inclusion during training and demonstrations.

About Anatomical Models:

They are developed with resin replication technology, addressing the shortage of natural anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Basal layer
- Spiny layer
- Granular layer
- Horny layer
- Lucid layer



- Free nerve ending
- Hypodermis
- Sweat gland
- Sweat duct
- Ruffini corpuscle
- Hair follicle
- Meissner's corpuscle
- Sebaceous gland
- Erector pili muscle
- Pacinian corpuscle
- Hypodermis
- Pacinian corpuscle
- Sweat gland
- Sweat duct
- Meissner's corpuscle
- Basal layer
- Spiny layer
- Granular layer
- Lucid layer
- Horny layer