



MG20099 | PULMONARY ALVEOLI







A magnified representation (approximately 1000 times) of a boundary alveolus, richly detailed and hand-painted, showing the alveolar wall, blood vessels, epithelial covering, and elastic and muscular elements. The separation between arterial and venous vessels is clearly visible at this scale.

Applications:

Ideal for the study of anatomy in schools and universities; indicated for training, medical and scientific information.

Technical Characteristics:

- * Detailed representation of the alveolar wall and its structures.
- * Numbered and hand-painted to facilitate the identification of structures.
- * Produced with quality resin, approved in toxicological tests.
- * Molding that guarantees high fidelity to the original model.
- * Includes an information card with related structures.
- * High-precision replicas.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform assists the learning process, allowing for the comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: 1000x
- * Material: Resin

Main Structures:

Alveolar cell (epithelium): Type I alveolar cells are thin, widely distributed squamous epithelial cells responsible for the main blood-air barrier. Type II alveolar cells are cuboidal epithelial cells responsible for the production of pulmonary surfactant, a substance that reduces surface tension in the alveoli, preventing their collapse.



Alveolar capillaries: A dense network of blood capillaries surrounds the alveoli, allowing gas exchange (oxygen and carbon dioxide) between the alveolar air and the blood. The proximity between the capillaries and the alveoli facilitates the efficient diffusion of gases.

Elastic fiber: Elastic fibers present in the alveolar wall provide elasticity and flexibility to the lungs, allowing expansion and retraction during inspiration and expiration.

Alveolar pore (Kohn's pore): Small pores that connect adjacent alveoli, allowing equalization of air pressure between alveoli and collateral air circulation.

Connective tissue: The interalveolar connective tissue supports the alveolar structure and contains capillaries, elastic fibers, and immune cells.

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

About Anatomical Models:

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

List of all visible structures:

- Alveolar cell (epithelium)
- Alveolar capillaries
- Elastic fiber
- Alveolar pore
- Connective tissue
- Elastic fiber
- Alveolar cell (epithelium)
- Elastic fiber
- Alveolar capillaries
- Alveolar cell (epithelium)
- Alveolar pore
- Alveolar pore
- Alveolar capillaries
- Alveolar capillaries
- Connective tissue
- Alveolar pore