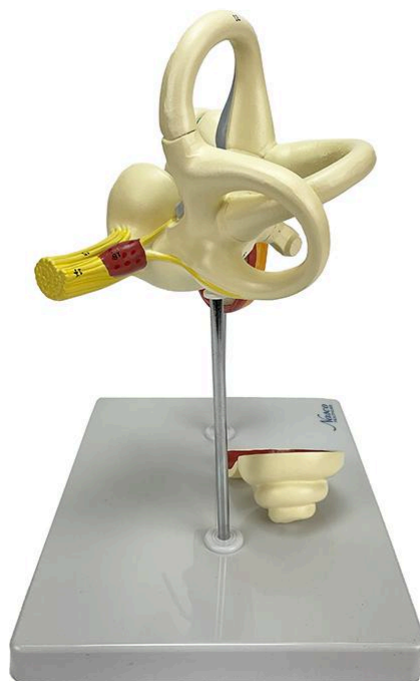
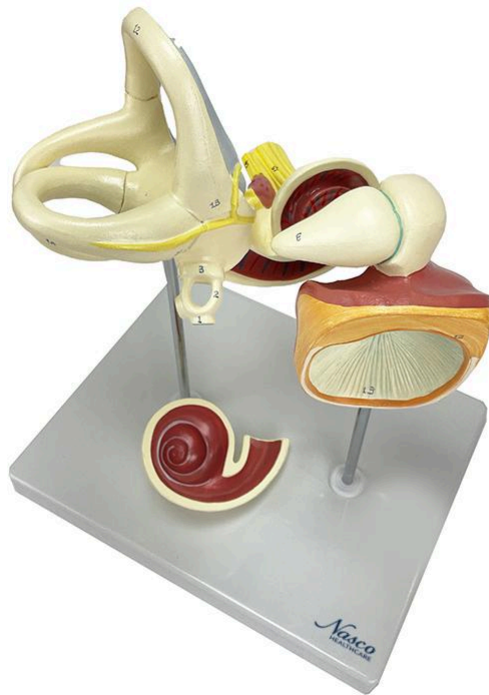




**MG38391 | HUMAN AUDITORY BONES,
TYMPANIC AND COCLEA MEMBRANE, 3
PARTS**







This anatomical model presents an enlarged representation of the inner ear, including the tympanic membrane, auditory ossicles, cochlea, and vestibulocochlear nerve. It is divided into three parts, allowing for detailed visualization of the structures of the bony and membranous labyrinth, and presents the superior semicircular canal open. The model is hand-painted and numbered to facilitate the identification of structures. It includes a polymer base for support.

Applications:

Ideal for the study of inner ear anatomy, assisting students and medical professionals, such as otolaryngologists and audiologists. Indicated for teaching in schools, universities, and hospitals, as well as being a valuable tool for training and demonstrations.

Technical Features:

- * Detailed and enlarged representation of the inner ear;
- * Hand-painted in didactic colors;
- * Numbered to facilitate the identification of structures;



- * Precision molding;
- * Manufactured from stable synthetic material and resin approved in toxicological tests;
- * Includes an information card with the related structures;
- * Precise 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 stimulates learning, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: Enlarged approximately 18 times.
- * Material: Synthetic resin.
- * Molding: Precision natural molding.

Main Structures:

Head of the stapes: Proximal portion of the stapes, the smallest bone in the human body, which articulates with the lenticular process of the malleus.

Crura of the stapes: The two thin rods that connect the head of the stapes to its base, transmitting sound vibrations.

Base of the stapes: The oval plate that fits into the oval window of the vestibule, transmitting vibrations to the inner ear.

Alveus communis: Anatomical structure associated with the bony labyrinth; it does not have a single and precise description in all anatomical texts. Its precise location and function need to be verified in specialized literature.

Cochlear apex: The most distal point of the cochlea, where the tympanic ramp and the vestibular ramp end, important for the perception of low frequencies.

Superior bony ampullae: Dilations in the superior semicircular canals, containing the ampullar crests, responsible for detecting the angular acceleration of the head.

Cochlear nerve: Part of the vestibulocochlear nerve, responsible for transmitting auditory



impulses from the organ of Corti to the brain.

Vestibular ganglion: Group of sensory neurons located inside the bony labyrinth, where the neurons that transmit information about balance originate.

Vestibular nerve: Part of the vestibulocochlear nerve, responsible for transmitting impulses related to labyrinthine balance to the brain.

Posterior semicircular duct: One of the three semicircular canals of the bony labyrinth, oriented in the vertical plane, detecting the rotation of the head around an anteroposterior axis.

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

About the Anatomical Models:

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

List of all visible structures:

- head of stapes
- crura of stapes
- base of stapes
- alveus communis
- cochlear apex
- superior bony ampullae
- cochlear nerve
- vestibular ganglion
- vestibular nerve
- posterior semicircular duct
- superior semicircular duct
- vestibule
- vestibular window
- lateral semicircular canal