



MG31535 | HUMAN THALAMUS 5 TIMES ENLARGED, 7 PARTS









The Thalamus 7 Parts anatomical model presents a detailed representation of the thalamus' functional areas, 5 times life size, with distinct colors for each nucleus and numbering for easy identification. The model is disassembled, allowing a complete analysis of the internal structures, and comes with a polymer base for support.

Applications:

The model is indicated for the study of neuroanatomy in schools and universities, training, patient explanations, and medical and scientific information. It is suitable for the detailed study of anatomy, assistance in surgical dissection training, and procedure demonstration.

Technical Differentials:

- * High didactic level;
- * Richness of detail;
- * Hand-painted;
- * High-precision natural molding;
- * Manufactured from stable and resistant synthetic material;
- * Precise replicas;
- * Resin approved in toxicological tests.



3D Technology and Augmented Reality:

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

Technical Specifications:

- * Scale: 5 times life size;
- * Material: Resin;
- * Numbered and hand-painted.

Main Structures:

Medial nuclear group: This group of thalamic nuclei is located in the medial portion of the thalamus and has connections with the hypothalamus and other structures of the limbic system, being involved in functions related to the regulation of the autonomic nervous system and emotional behavior.

Mediodorsal nucleus: Located in the medial portion of the thalamus, this nucleus receives afferents from various cortical areas and the limbic system, integrating sensory, emotional, and cognitive information. It plays a crucial role in memory, emotion, and higher cognitive functions.

Internal medullary lamina: It is a white matter structure that divides the thalamus into distinct nuclear groups. It serves as an important anatomical landmark and guide for the functional organization of the thalamus.

Anterior nuclei: Located in the anterior portion of the thalamus, these nuclei are mainly involved in memory and learning processes, receiving impulses from the mammillary body and projecting to the cingulate cortex.

Intralaminar nuclei: Scattered in the internal medullary lamina, these nuclei receive afferents from the reticular formation and project diffusely to the cerebral cortex, being involved in the regulation of the sleep-wake cycle and state of alertness.

Posterior lateral nucleus: Located in the posterior lateral region of the thalamus, this nucleus receives sensory information from the optic pathway, being involved in visual processing.

Dorsolateral nucleus: This nucleus, located in the dorsolateral region of the thalamus,



receives afferents mainly from the cerebellum and the striatum, participating in the regulation of movement and motor planning.

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, offering an alternative to natural anatomical models for teaching and research. They present the main morphological characteristics with excellent cost-benefit, good resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Anterior nuclear group
- Ventral anterior nucleus
- Lateral dorsal nucleus
- Ventral lateral nucleus
- Lateral posterior nucleus
- Ventral posterior lateral nucleus
- Midline thalamic nuclei
- Medial nuclear group (mediodorsal nucleus)
- Intralaminar nuclei
- Ventral posterior medial nucleus
- Internal medullary lamina
- Pulvinar
- Medial geniculate nucleus
- Lateral geniculate nucleus