

3B MICROanatomy™ Kidney

This model shows the morphologic/functional units of the kidney greatly magnified.

The fine-tissue structures that serve the production of urine are shown in six model zones that are identified with the letters A - F. The individual model zones are described from left to right as seen by the viewer:

Zone A: Longitudinal section of a kidney.

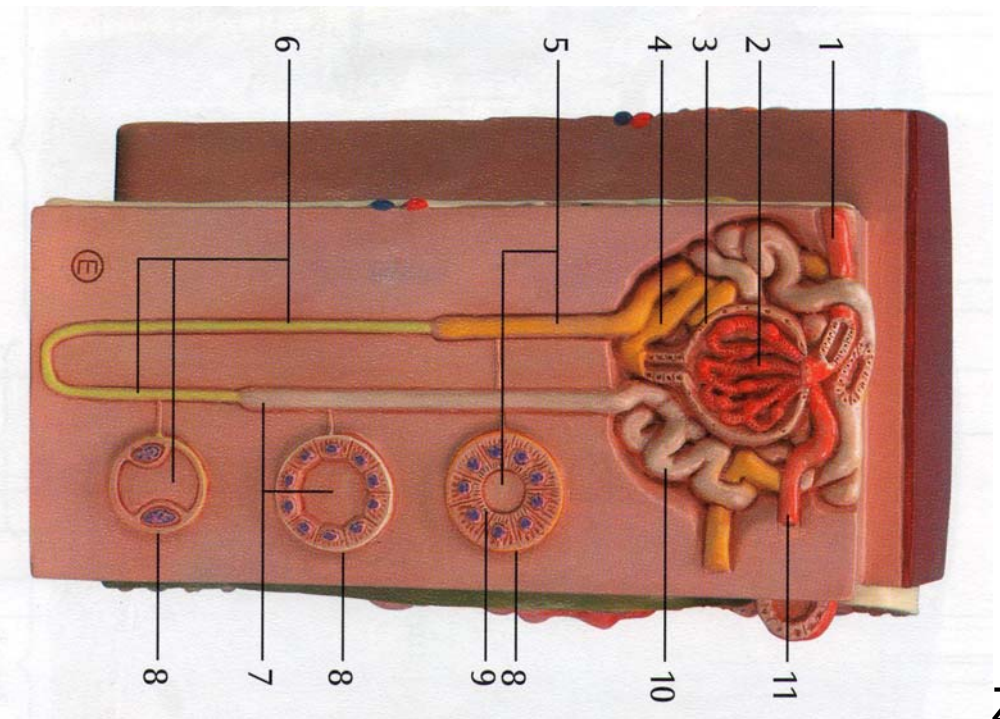
Zone B: Section of renal cortex and renal medulla.

Zone C: Wedge-shaped section of a kidney lobe with a diagrammatic depiction of three nephrons with Henle's loops of different lengths and diagrammatic illustration of the vascular supply.

Zone D: Diagrammatic illustration of a nephron with a short Henle's loop and didactic/diagrammatic illustration of the vascular supply.

Zone E: Diagrammatic illustration of an opened renal corpuscle with nephron and light-microscopic transverse sections of the proximal, attenuated and distal segments of a renal tubule.

Zone F: Diagrammatic/didactic illustration of an opened renal corpuscle.



Zone E

- 13 Arcuate vein
 - 14 Arcuate artery
- D**
- 1 Proximal convoluted tubule
 - 2 Renal corpuscle
 - 3 Junctional tubule
 - 4 Distal convoluted tubule
 - 5 Interlobular vein
 - 6 Interlobular artery
 - 7 Arcuate artery
 - 8 Arcuate vein
 - 9 Proximal straight tubule
 - 10 Distal straight tubule
 - 11 Collecting tubules
 - 12 Capillaries
 - 13 Attenuated tubule
- E**
- 1 Arteriola afferens
 - 2 Glomerulus
 - 3 Bowman's capsule
 - 4 Proximal convoluted tubule
 - 5 Proximal straight tubule
 - 6 Attenuated tubule
 - 7 Distal straight tubule
 - 8 Basement membrane
 - 9 Brush border
 - 10 Distal convoluted tubule
 - 11 Arteriola efferens
- F**
- 1 Distal tubule
 - 2 Arteriola efferens
 - 3 Extraglomerular mesangial cells
 - 4 Glomerulus
 - 5 Bowman's capsule
 - 6 Proximal tubule
 - 7 Podocytes
 - 8 Arteriola afferens
 - 9 Macula densa
- A**
- 1 Renticapsule
 - 2 Renal cortex
 - 3 Renal medulla
 - 4 Renal pelvis
 - 5 Renal calix
 - 6 Ureter
 - 7 Renal sinus
 - 8 Renal column
- B**
- 1 Renal cortex
 - 2 Renal medulla
 - 3 Medullary rays
 - 4 Renal labyrinth
 - 5 Renal corpuscle
- C**
- 1 Bowman's capsule
 - 2 Glomerulus
 - 3 Interlobular artery
 - 4 Interlobular vein
 - 5 Renal corpuscle
 - 6 Proximal tubule
 - 7 Attenuated tubule
 - 8 Distal tubule
 - 9 Junctional tubule
 - 10 Collecting tubules
 - 11 Papillary duct
 - 12 Vasa recta