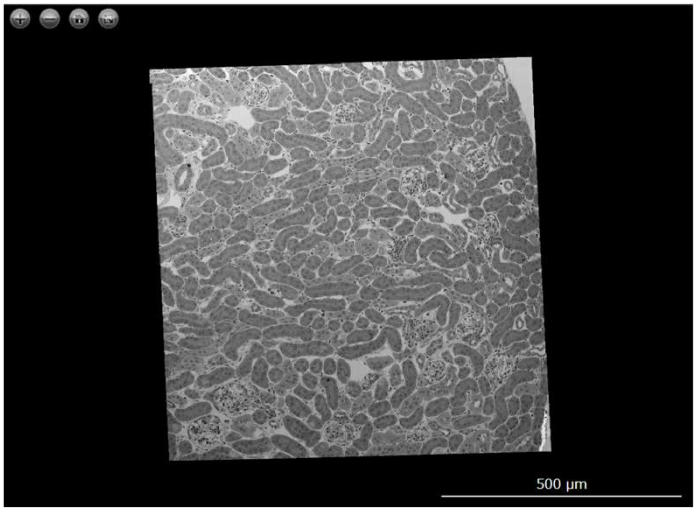
# Ultrawide transmission electron microscopy image of a mouse kidney

Related product : SiN Window Chip, JEM-1400

Ultrathin sections of a mouse kidney mounted on a SiN Window Chip were imaged using the Limitless Panorama (LLP) function, an automated montage system. Sections mounted on a flat, grid-bar free SiN Window Chip allow us to view the entire area without any wrinkles. To record this wide field of view in high resolution, automatic montage imaging (96 × 90 images) was carried out using LLP at a pixel size of approximately 5.6 nm/pixel. The images thus obtained have approximately 20 billion pixels, allowing us to observe the entire kidney cortex region (distribution of glomeruli and the network of tubules) while maintaining a resolution that allows us to observe the basement membrane structure of the glomerulus.

The following image have been processed from wide-area images taken by LLP and can be viewed with a Web browser. Clicking on the image will open a new tab for viewing the wide area image.




Sample : Mouse kidney
Imaging Device : JEM-1400 / Matataki Flash Camera (2,048 x 2,048 pixels)
Image acquisition area : H 800 µm x W 760 µm with 8,640 (H 96 x W 90) images
Pixel size of the image : 5.6 nm / pixel
Total number of the pixels : 20 Gigapixel
Acceleration Voltage : 80 kV

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