

Sapphire Knives

For Vibrating Microtome Sectioning

Improved Section Quality

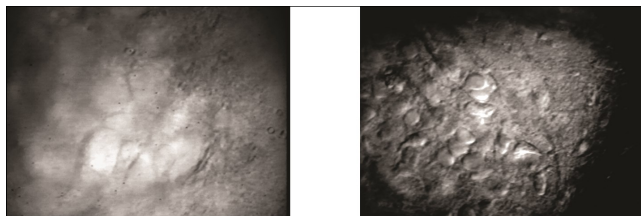
Surface cells Intact for Electrophysiology on Brain

Applied Diamond's sapphire knife provides significantly improved section quality over traditional razor blades, particularly in electrophysiology applications. Distortion-free sections are possible at section thickness down to 10 microns.

Smoother Surfaces for Histology

Sapphire Knives make it easier to follow labeled elements

By making a cleaner cut, the surface cells remain alive and intact, so the researcher can more easily explore the live and responsive interior cells. The clean cut produced by the sapphire knife results in smoother surfaces, making it easier to follow small labeled elements.



Razor Blades

AD's Sapphire Knife

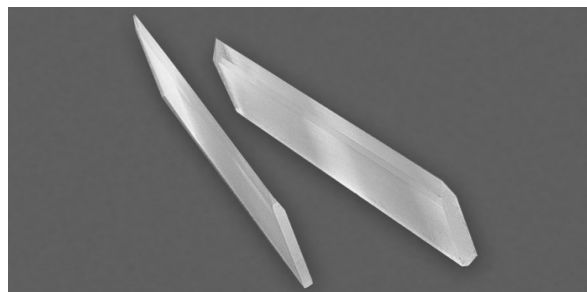
"Sapphire blades can be counted on for clean, consistent slices with minimal tissue distortion."

Michael Andresen, Oregon Health Sciences University

Thinner Sections are possible with a vibrating microtome

The sapphire knife fits tightly in knife holders of most vibrating microtomes. Now your vibrating microtome is an attractive alternative to the cryostat when you need thin sections of fresh or lightly fixed tissue for:

- Fluorescent labeling
- Autoradiography
- Immunohistochemistry



Hundreds of times harder than steel; This knife is able to slice distortion-free sections at a section thickness down to 10 microns.

Extend the Life of your Knife

Applied Diamond will sharpen your knife in less than a week

Used properly, your sapphire knife edge will last for thousands of sections. The knife is easily cleaned of glue and tissue and Applied Diamond will restore your cutting edge to its original condition to extend the life of your knife. Our quick turnaround time, usually less than one week, minimizes down time.

Use Older Specimens

Easily Sections Through Myelination in Mature Specimens

"The sapphire knife from DDK is clearly superior to carbon steel in section quality, particularly in cutting difficult tissue samples from non-infant rats or primates."

Nathan Urban, University of Pittsburgh
"DDK" references a division of Applied Diamond

Specifications

Material	Synthetic Single Crystal Sapphire
Edge Length	1.5 in. (40mm)
Blade Height	0.5 in. (12mm)
Blade Thickness	0.035 in. (0.9mm)



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