



## INSTRUCTIONS FOR THE USE OF THE RODENT BRAIN MATRIX

The **Rodent Brain Matrix** (RBM-2000, RBM-3000 and RBM-4000, etc.) was design to aid in the free-hand dissection of the rodent brain. Each RBM is made of high-grade zinc to allow for easy cleaning, sterilization, and chilling. It is provided with coronal or sagittal channels, which are placed exactly at 1.0mm center-to-center. The following guidelines are provided in order to facilitate use of this instrument.

- 1.) After the brain is removed from the skull, place it ventral side up in the **Rodent Brain Matrix**. When properly seated in the matrix, the brain's ventral surface should be parallel and below the top surface of the instrument.
- 2.) Empirical use will determine which channel the first razor blade should be placed in. We recommend use of three double edge razor blades or any combination of single edge razor blades. When using double edge razor blades the top edges should be covered with tape for safety. The double edge blade is thinner than the single edge blade and therefore allows for the placement of two blades in the same channel. Which facilitates the technique described in step three.
- 3.) The first blade is placed in the channel, which lie on the caudal most boundary of the slice you plan to take, two blades should then be placed in the channel, which corresponds to rostral boundary. Each channel utilized adds 1.0mm nominally to the thickness of the slice. Once all three blades are in place, the first and second blade can be lifted out while leaving the third (rostral most blade) in place. The slice desired is lifted out between the two blades. The third blade which is left in place serves two purposed 1) it eliminates any movement on the brain which is left within the matrix, and 2) it now serves as the first blade which will be utilized for the removal of the next slice, if desired.

Use of the **Rodent Brain Matrix** in this manner will easily allow the investigator to slice sections serially (as thin as 1.00mm) throughout the entire extent of the brain. Once a given slice has been removed the brain regions, which are of interest to the researcher, can be dissected or micro punched from the slice. ***“Remember to thoroughly rinse and remove any residue tissue after every use”.***

Recommended Matrix Blades for stand use:

**BTK-130** | Brain & Tissue Knives for Matrices, Stainless Steel, .010” thick, 130 mm long (package of 50)  
Available on our website.

Recommended Cleaning Tips:

Ultrasonic cleaning with no heat and bio-detergent works well to remove tissue. Cold methods of sterilization are preferred over autoclaving. Autoclaving has a tendency to discolor matrix at higher heats. If autoclaving, use the lowest heat setting possible. Cold methods like dipping in CaviCide works well for disinfecting matrix.

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