Verifying Cannula Placement

Dye Method:

Upon sacrifice, verify the placement of the cannula and its patency as follows:

1. Fix the brain with a suitable fixative (e.g., 4% formaldehyde).
2. Remove the jaw and roof of the mouth of the animal and expose the floor of the brain.
3. Cut the catheter and slowly inject a dye (e.g., Evans Blue) through the catheter toward the cannula.
4. Expose the tip of the cannula and examine the dye stains to confirm its placement. Alternatively, after the cannula is removed, the brain can be fixed, frozen, and sectioned to confirm cannula placement.

This method can also be found on the Brain Infusion Kit package insert (Section V) Download package insert here

CSF Reflux Method:

Look for reflux of CSF upon insertion of the infusion cannula. This reflux is evident in the majority of successful cannulations. [1]

Angiotensin II Method for third ventricle verification [1]
*(For use with ALZET compatible acute guide cannulae)***:**

1. Inject angiotensin II into the infusion cannula of an unanesthetized rat (30 ng in 3 µl of saline).
2. Monitor for drinking response (>5 ml in 30 minutes)

[1] *White JD, Schwartz MW. Using osmotic minipumps for intracranial delivery of amino acids and peptides. Methods in Neurosciences, Providing Pharmacological Access to the Brain: Alternate Approaches, T R Flanagan, et al. Academic Press, San Diego 1994; 21:187-200*

To speak with a technical support representative regarding your specific study, call 800-692-2990 or e-mail us at alzet@durect.com