Guidance for Completing your NBB Tissue Request

Planning Your Tissue Request

- If you are not sure precisely what tissue quantities and/or preservation methods are best for your research project, please submit a request for help to the NIH NeuroBioBank email address before completing the on-line request.
- The Request Form requires you to provide a **detailed** rationale and supporting documents for 1) number of subjects requested, 2) amount of tissue requested per subject, and 3) number of brain regions requested. Please see the Acceptable Tissue Amount Guidelines (below) to plan your request.
- Our Wizard will provide recommendations (through a short series of questions) for the most appropriate subjects for your study.
- Our specimens are available in various preparations. Learn more here and select the appropriate preparation as it will affect your study.

Completing Your NBB Tissue Request Form

1. Complete all applicable fields. Required fields must be completed in order for the system to accept the request. Incomplete information will delay the review of your request, especially Specimen Shipping Information.
2. **Request Name** should be a short unique descriptor of your request.
3. **Requested Specimens** lists all of the specimens you selected for your study (using the specimen search). This list must contain all the specimens you are interested in obtaining. **Note: Different preparations (e.g., fixed, frozen) of the same brain region/tissue type are separate specimens.**
    a. For each specimen listed, you must enter the amount of each specimen needed for your study using the "Amount Requested" field. Please follow the Acceptable Tissue Amount Guidelines (below) when submitting your request. A detailed rationale must be provided for any deviations from these guidelines.
    b. To find comparators or appropriate specimens for a pilot study, please use our 'Non-diagnostic flag' search facet.
    c. To modify your list of selected specimens, click "Edit Requested Specimens". This will open the specimen search, where you can add or remove specimens as needed. Once complete, click "Return to Request" at the top of the search page. Your request form will then update with your revised specimen list.
    d. Be sure to click "Save for Later" to keep your list and form saved. This option is only available when you are logged in.

4. **Request Details**
    a. The request ID number will appear at the top of your MTA.
    b. Concisely describe the request according to the instructions. If you are requesting multiple anatomical regions per subject, the rationale must be clearly indicated here for each region/tissue type.
    c. List each type of assay or method to be used with the requested tissue. Include the amount of tissue needed for each assay/method per subject.
        i. Example: "qPCR, 2mg grey matter per subject."
    d. Indicate whether you or your direct collaborators have used the method(s) proposed in this request with human postmortem tissue before.
        i. If you completed the Wizard these fields will be autopopulated.
        ii. If the answer is "No," then this request should be for tissue for pilot studies. Please use our 'Non-diagnostic flag' search facet to identify appropriate specimens. To learn more about our study types click here.
    e. Provide a rationale for the number of subjects requested. Acceptable rationales include power analyses, or accepted standards in the field (with appropriate citations).

Determining Your Tissue Needs

The table below provides guidelines for generally acceptable amounts of tissue that can be requested for different types of studies. Each of the tissue amounts below will provide sufficient material to perform each type of methodology listed. These values were derived in collaboration with researchers who have successfully performed each methodology using human brain tissue.

If your methodology is not listed below, please include a detailed rationale supporting the amount of tissue you are requesting.

If your methodology is below, but you require more tissue than is indicated, you must include a detailed rationale supporting your request outside of the acceptable range.

Please note that multiple areas, such as hippocampal subfields and thalamic and hypothalamic nuclei, are small, and many investigators are interested in studying these regions. As such, for certain methodologies, the NBB may indicate that a tissue amount which differs from the below guidelines will be provided.

If you need guidance on any issues related to tissue amount guidelines, please contact the NIH NeuroBioBank at neurobiobank@mail.nih.gov.

To avoid delays in the approval and fulfillment process, requests for large tissue amounts must include a detailed justification and relevant supporting documentation.

Method	Accepted Tissue Amount/Region/Subject
FACS sorting with NeuN	≤ 100mg of gray matter
HITS-CLIP	≤ 300mg
Immunoblot	≤ 10mg of tissue per protein examined
Immunohistochemistry	Sufficient tissue for ≤ 6 sections per immunolabeling *(May be provided as free floating sections, formalin-fixed paraffin-embedded sections, fixed tissue blocks, or paraffin-embedded tissue blocks dependent upon region requested and brain bank)*
Mass Spec:	
Simple Mass Spec with no enrichment or multidimensional fractionation	≤ 15mg
Mass Spec with sucrose density gradient based sub-cellular enrichment	≤ 350mg
Mass Spec with multidimensional separation with or without isobaric labeling tags (eg., TMT or iTRAQ)	≤ 150mg
Co-IP with Mass Spec	50 - 500mg
Mass Spec for post-translational modifications	50 - 500mg
Microarray	≤ 5mg
qPCR	≤ 5mg
RNASeq	
Total gray or white matter	≤ 60mg
Single nucleus	≤ 75mg
Slide-Based Assays (e.g., *in situ* hybridization, laser-capture microdissection)	Sufficient tissue for ≤ 6 sections per condition