
Lab Dept: **Anatomic Pathology**

Test Name: **CILIA BIOPSY**

General Information

Lab Order Codes: Orders are communicated via the Surgical Pathology request form

Synonyms: Ciliary biopsy; Cilia motility; Immotile cilia; Cilia B Frequency

CPT Codes: 88305 – Level 4, surgical pathology, gross and microscopic exam
88329 – Pathology consult during surgery
88348 – Electron microscopy, each sampled site

Test Includes: Electron microscopy (EM) of Cilia biopsy

Logistics

Test Indications: Useful for evaluating cilia for motility and ultrastructure in cases of chronic upper respiratory infection and/or suspected immotile cilia syndrome or Kartegener Syndrome.

Lab Testing Sections: Anatomic Pathology – Sendouts

Referred to: Mayo Medical Laboratories

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Monday - Thursday

Turnaround Time: 7 - 21 days

Special Instructions: Obtain the biopsy from the upper airways or the carina. The mucosa over the adenoids is more likely to yield an interpretable sample of cilia; turbinate biopsies frequently show inflammation-associated loss of ciliated epithelium.

Specimen

Specimen Type: Tissue

Container: Biopsy for electron microscopy: obtain container with fixative from laboratory.

Draw Volume: See Collection

Processed Volume:	See Collection
Collection:	<p>Specimen for direct observation of motility: transport fresh to lab immediately in lactate ringers. Solution can be obtained from the Histology Lab.</p> <p>Specimen for electron microscopy: place in fixative immediately upon biopsy.</p> <p>Trump's fixative (4% formalin: 1% glutaraldehyde) (Supply T130) is optimal. If no tissues fixed primarily in glutaraldehyde are available, shavings can be taken from the surface of tissues in formalin, where fixation was most rapidly achieved.</p>
Special Processing:	N/A
Patient Preparation:	Physician preference
Sample Rejection:	Improper specimen, unlabelled or mislabeled specimen

Interpretive

Reference Range:	Interpretive report (final reports will be scanned into the HIS and copies distributed to the ordering MD and surgeon)
Critical Values:	N/A
Limitations:	Artifactual loss of cilia or secondary loss of cilia due to chronic inflammatory changes, insufficient cilia numbers for definite diagnosis by electron microscopy.
Methodology:	Direct semi-phase-contrast microscopy, routine light microscopy, transmission electron microscopy
References:	<p>Pathology Department, Children's Hospitals and Clinics</p> <p>Mayo Medical Laboratories, February 2012</p>