



## Mitochondrial Respiratory Chain Enzyme (Skeletal Muscle) Request Form



Neurometabolic Unit Website

**Dr. Amanda Lam**  
Neurometabolic Unit  
6<sup>th</sup> Floor Institute of Neurology  
Queen Square House  
Queen Square  
London WC1N 3BG  
Tel: 0203 448 3818

**E-mail:** [uclh.enquiry.neurometabolic@nhs.net](mailto:uclh.enquiry.neurometabolic@nhs.net)

Please refer to the current published User Manual on our website for further information for patients and users. <https://www.uclh.nhs.uk/our-services/find-service/neurology-and-neurosurgery/neurometabolic-unit>

### For Neurometabolic Use Only

Winpath lab number:

In house code:

Freezer rack location:

Homogenate location

### Identity of person performing biopsy:

**Surname:**

**Forename:**

**Gender:**

**DOB:**

**Hospital no:**

**NHS no:**

**Hospital:**

**Specimen date and time:**

**Consultant name and e-mail:**

**Clinical and drug therapy details:**

*PLEASE NOTE the above details are essential to allow for the accurate interpretation of results.*

### Collection Instructions

- Label an appropriate tube using permanent marker with patient surname, first name, date of birth, hospital number, and specimen date.
- Muscle specimen should be between 50-100mg. This specimen should be no smaller than 50mg (approx. same size as an orange pip) for accurate analysis to be possible.
- Collect the muscle biopsy into the labelled tube.
- ALL specimens should be frozen immediately at the bedside on dry ice or liquid nitrogen and transported to the laboratory frozen, or stored at  $-70^{\circ}\text{C}$  until transit.
- Please ensure all samples arrive during lab opening hours: 9:00am – 17:30pm Monday to Friday (see user manual for more details).

For MUSCLE Ubiquinone (CoQ10) analysis, please indicate YES  or NO

For LIVER respiratory chain enzyme analysis, please contact the laboratory directly.

**SPECIMENS FAILING TO ADHERE TO ALL STATED SAMPLE REQUIREMENTS AND LABELLING  
MAY NOT BE PROCESSED -please contact the laboratory with any queries.**

Neurometabolic use (Only)				
<b>Total weight</b>	_____ mg	<b>Residual muscle:</b>		
<b>Assayed weight:</b>	_____ mg	<b>Residual muscle location:</b>		
<b>Test</b>	<b>Result (nmol/min/ml)</b>	<b>X Result</b>	<b>Ratio to CS</b>	<b>Reference Range</b>
Complex I				0.118 - 0.332
Complex II/III				0.072 - 0.335
Complex IV				0.013 - 0.039
Citrate synthase (CS)			N/A	N/A
Results generated by: Date:	Results transcribed by: Date:	Results 2 <sup>nd</sup> check by: Date:	Results authorised by: Date:	

Mitochondrial RCE Request Form - Version: 1.10. Index: NMU-FORM-Mitochondrial RCE Request Form. Printed: 20-Oct-2021 11:43



Mitochondrial RCE Request Form - Version: 1.10. Index: NMU-FORM-Mitochondrial RCE Request Form. Printed: 20-Oct-2021 11:43  
Authorised on: 02-Sep-2021. Authorised by: Amanda Lam. Document Unique Reference: 35-105124471. Due for review on: 02-Sep-2022

Author(s): Iain Hargreaves

