

Centre for Human Metabolomics (CHM)

<b>Test:</b>	<b>Mitochondrial respiratory chain enzyme analyses (muscle)</b>
<b>Test Code:</b>	6 x 4256 (6 enzymes) + 1 x 4117 (protein assay)
<b>Tariff (including VAT):</b>	R 8 721.90
<b>Description:</b>	Assay, quantification, and results interpretation for complexes I, II, II+III, III, IV and citrate synthase.
<b>Turnaround time:</b>	35-60 work days from receipt of sample at our laboratory
<b>Transit stability / Sample viability:</b>	Send muscle sample (preferably early in the week to prevent weekend delays) with courier service. The sample should be sent in a polystyrene box with sufficient dry ice (sample must be kept frozen at all times).
<b>Comments:</b>	Analysis cannot be performed on samples that have thawed at any time after collection. More than the mentioned size is not necessary, except if microscopy must be done (in which case this has to be arranged separately with the diagnostic laboratory that provides that service).
<b>Sample required:</b>	<ol style="list-style-type: none"> <li>1. A minimum of 100 mg skeletal muscle sample (preferably from <i>vastus lateralis</i>) is required (size: ± half the size of a ten cent coin).</li> <li>2. The biopsy must be placed as is (without any addition) in a micro-centrifuge tube (e.g. 1.5ml polypropylene, preferably) or larger. Place tube on ice as soon as possible after it's been taken.</li> <li>3. Freeze the tube with sample as soon as possible (not longer than 1 hour after collection) in liquid nitrogen or at -80°C. Store sample frozen at -80°C until it can be transported to our laboratory.</li> </ol>
<b>Method:</b>	Spectrophotometry
<b>Reference range &amp; units:</b>	Units will be provided in nmol/min/UCS (UCS = μmol/min citrate synthase activity). Information with regards to reference ranges will be provided with profile.
<b>Consultant/Scientist:</b>	Dr Marli Dercksen, Prof Francois van der Westhuizen, Prof Roan Louw
<b>Telephone number:</b>	018 299 2302 / 018 299 2318 / 018 299 4074
<b>E-mail address:</b>	Francois.vanderWesthuizen@nwu.ac.za / Roan.Louw@nwu.ac.za / Marli.Dercksen@nwu.ac.za
<b>Contact for results &amp; other inquiries:</b>	Hayley van Dyk / Ansie Mienie
<b>Telephone number:</b>	018 299 4074 / 018 299 2312 / 018 299 1815 / 018 285 2652 (leave message)
<b>Fax number:</b>	018 299 2316
<b>E-mail address:</b>	<a href="mailto:hayleyvandyk91@gmail.com">hayleyvandyk91@gmail.com</a> / <a href="mailto:ansie.mienie@nwu.ac.za">ansie.mienie@nwu.ac.za</a>
<b>Delivery address for samples:</b>	URGENT: Muscle biopsy sample on dry ice. Att: Dr Marli Dercksen, Division of Biochemistry, PLIEM LAB POTCH, Building F3, Laboratory G20 (ground floor), 11 Hoffmann street, North-West University, Potchefstroom