

# Complex IV Human Specific Activity Microplate Assay Kit ab109910

[11 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Complex IV Human Specific Activity Microplate Assay Kit
<b>Detection method</b>	Colorimetric
<b>Sample type</b>	Cell culture extracts, Tissue
<b>Assay type</b>	Enzyme activity
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Product overview</b>	This rapid multiplexing microplate kit is used to determine both the activity and quantity of cytochrome c oxidase in a human sample with greater speed and simplicity. The ratio of the two is a measure of specific activity. The COX enzyme is immunocaptured within the wells of the microplate and the activity is determined by following the oxidation of reduced Cytochrome c colorimetrically by the absorbance change at 550 nm. Subsequently, in these same wells the quantity of the enzyme can then be determined by adding a COX specific detector antibody and the appropriate alkaline phosphatase conjugated antibody; this phosphatase changes a substrate from colorless to yellow at 405 nm. This reaction takes place in a time dependent manner proportional to the amount of protein captured in the wells. Included in this kit for performance of the multiplexing assay are buffers, detergent, substrates, and 96-well microplate with monoclonal antibody pre-bound to the wells of the plate, allowing for a stream-lined assay.

<b>Notes</b>	<p><b>Range of complex IV / cytochrome c oxidase assay kits</b></p> <p>Biochemical assay - <a href="#">ab239711</a></p> <p>Immunocapture with biochemical assay (plate-based)*** - <a href="#">ab109911 (rodent)</a> and <a href="#">ab109909 (human)</a></p> <p>*** Most popular assay format</p> <p>Immunocapture with biochemical assay (dipstick) - <a href="#">ab109878 (rodent)</a> and <a href="#">ab109876 (human)</a></p> <p>Immunocapture with biochemical assay and ELISA - <a href="#">ab109910 (human)</a> (this kit)</p> <p>ELISA - <a href="#">ab179880 (human)</a></p>
--------------	--

### Other related products

Review the [mitochondrial assay guide](#), or the full [metabolism assay guide](#) to learn about more assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress, and also how to assay metabolic function in live cells using your plate reader.

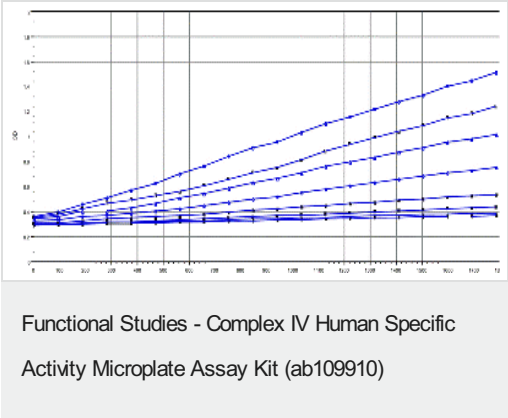
<b>Platform</b>	Microplate reader
-----------------	-------------------

Properties

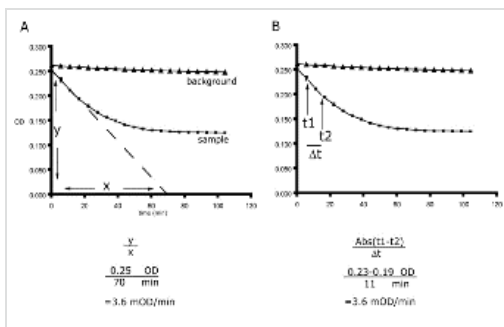
Storage instructions Please refer to protocols.

Components	Identifier	96 tests
20X Buffer		1 x 15ml
96-well microplate (12 strips)		1 unit
AP Development Reagent		1 x 400µl
AP label 2500X	Tube B	1 x 12µl
Detector antibody	Tube A	1 x 1ml
Detergent		1 x 1ml
Development buffer	Tube 3	1 x 10ml
Reagent C (Reduced Cytochrome c)		1 x 1ml
Wash Buffer	Tube 2	1 x 2ml

Images

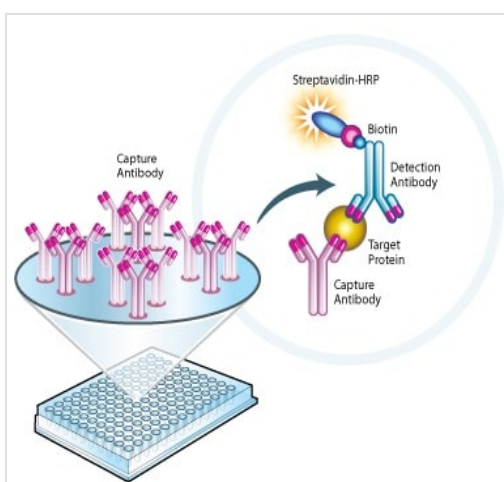


Functional study using Complex IV Human Specific Activity Microplate Assay Kit (ab109910).



Functional study using Complex IV Human Specific Activity Microplate Assay Kit (ab109910).

Functional Studies - Complex IV Human Specific Activity Microplate Assay Kit (ab109910)



Principle of Sandwich ELISA.

Sandwich ELISA - Complex IV Human Specific Activity Microplate Assay Kit (ab109910)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors