

Complex I Human Protein Quantity Dipstick Assay Kit

ab109722

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

Overview

Product name	Complex I Human Protein Quantity Dipstick Assay Kit
Sample type	Cell culture extracts, Tissue
Assay type	Sandwich (quantitative)
Species reactivity	Reacts with: Cow, Human
Product overview	<p>ab109722 contains 48 dipsticks and necessary components to quantify the levels of the fully assembled Complex I enzyme complex in human and bovine samples. The kit includes sufficient materials to generate a standard curve and evaluate several unknown samples.</p> <p>Based on the immunologic sandwich assay, the kit utilizes two monoclonal antibodies (mAbs) specific to different antigens present on the Complex I enzyme complex. One antibody is immobilized on the nitrocellulose membrane in a thin line perpendicular to the length of the dipstick, while the other is gold-conjugated and combined with the sample mix. The sample contents containing the gold-conjugated mAb wick past the mAb immobilized on the dipstick. When assembled Complex I is present in the sample, a red line appears at the site of the anti-Complex I antibody line. The signal intensity is directly related to the amount of Complex I in the sample. The signal intensity is best measured by a dipstick reader or may be analyzed by another imaging system. To identify defects in Complex I that do not affect enzyme assembly combine this assay with ab109720 to determine the relative specific activity of Complex I.</p>
Notes	<p>All components are stable in their provided containers at room temperature out of direct sunlight.</p> <p>After diluting the 10X Blocking Buffer to 2X, store at 4°C. For long-term storage, all buffers can be stored at 4°C.</p>
Tested applications	Suitable for: Sandwich ELISA
Platform	Reagents

Properties

Storage instructions Store at +4°C. Please refer to protocols.

Components	48 tests
Buffer B (10X Blocking solution)	1 x 0.4ml

Components	48 tests
Dipsticks	1 x 30 units
Extraction Buffer (ab260490)	1 x 15ml
Gold-conjugated antibody (dried in microplate wells)	1 x 30 tests
Wash buffer	1 x 2ml

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109722 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent dilution.

Images

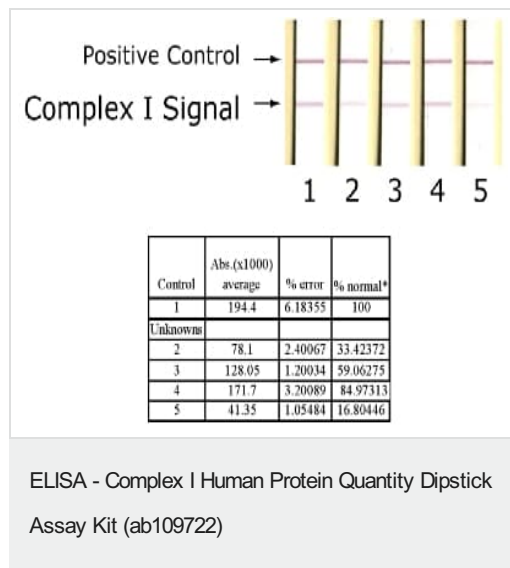


Figure 2. An example using ab109722 to quantify Complex I levels using various concentration of human fibroblast extract.

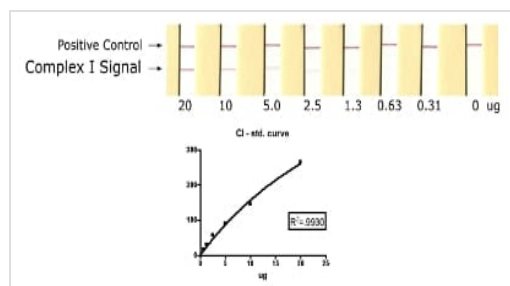
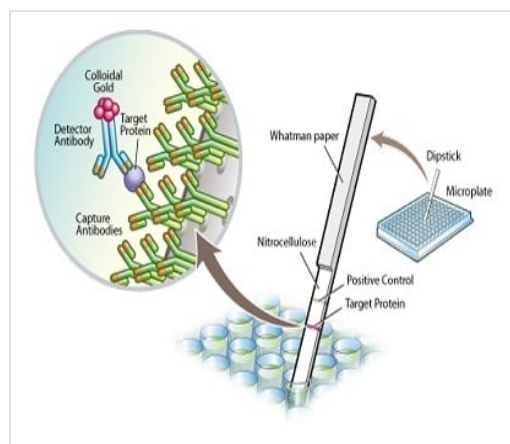


Figure 1. An example using ab109722 to quantify Complex I levels using various concentration of human fibroblast extract.

ELISA - Complex I Human Protein Quantity Dipstick Assay Kit (ab109722)



Sandwich ELISA - Complex I Human Protein Quantity Dipstick Assay Kit (ab109722)

Dipstick assays use the well-established lateral flow concept, whereby capture antibodies are striped onto nitrocellulose membrane and a Whatman paper wicking pad draws the sample through the antibody bands. Detector antibodies, conjugated to gold, are dried in the wells of a 96-well plate. Sample is added to the well, the dipstick inserted, and within minutes the line for each target is revealed as the protein-detector antibody-gold complex binds with the capture antibodies. Multiplexing dipstick assays have multiple target protein lines. A positive control goat anti-mouse antibody line is included on all assays to ensure that adequate wicking of the sample occurred.

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