# abcam

## Product datasheet

# Histone H4 Total Quantification Kit (Colorimetric) ab156909

1 References 5 Images

Overview

Product name Histone H4 Total Quantification Kit (Colorimetric)

**Detection method**Colorimetric

Sample type Cell culture extracts, Tissue Extracts, Nuclear Extracts

Assay type Quantitative

Sensitivity >= 0.5 ng/well

Range 50 ng - 1000 ng

Assay time 3h 30m

Species reactivity Reacts with: Mouse, Rat, Human

**Product overview** Abcam's Histone H4 Total Quantification Kit (Colorimetric) is a complete set of essential

components which enables an experimenter to colorimetrically quantify levels of histone H4 proteins independent of their modified states. It can also be used for normalizing the modified

histone H4 content of samples when run in parallel with Abcam's histone modification

quantification kit series.

The kit is suitable for specifically measuring total histone H4 using human, mouse, and rat samples, including fresh and frozen tissues and cultured adherent and suspension cells.

**Platform** Microplate reader

#### **Properties**

**Storage instructions** Please refer to protocols.

Components	48 tests	96 tests
1000X Capture Antibody	1 x 5µl	1 x 10μl
10X Wash Buffer	1 x 14ml	1 x 28ml
2000X Signal Reporter	1 x 6µl	1 x 12μl
8-Well Assay Strips (with Frame)	1 x 6 units	1 x 12 units

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Components	48 tests	96 tests
Color Developer	1 x 5ml	1 x 10ml
Enhancer Solution	1 x 120µl	1 x 240µl
Histone Assay Buffer	1 x 4ml	1 x 8ml
Standard Control, 100 μg/mL	1 x 10µl	1 x 20µl
Stop Solution	1 x 5ml	1 x 10ml

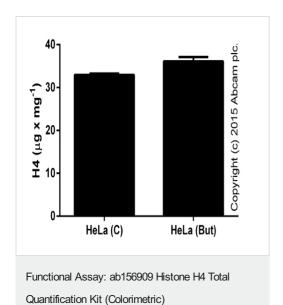
#### Relevance

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

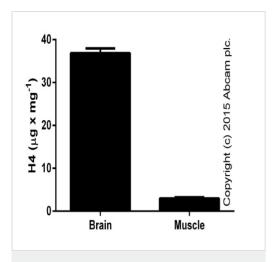
#### **Cellular localization**

Nuclear

#### **Images**

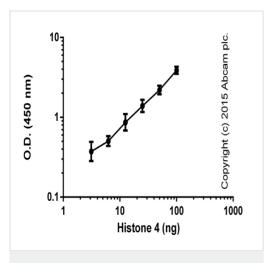


Total H4 per mg of extracted histones from HeLa control cells (C) or cells treated with 10 micromolar sodium butyrate (But) (extracted using <u>ab113476</u>; 50-500 ng per well) (duplicates +/- SD).

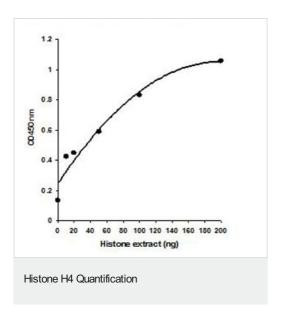


Total H4 per mg of extracted histones from murine tissue preparations (extracted using <u>ab113476</u>; 50-500 ng per well) (duplicates +/- SD).

Functional Assay: ab156909 Histone H4 Total Quantification Kit (Colorimetric)



Functional Assay: ab156909 Histone H4 Total Quantification Kit (Colorimetric) Standard curve with background signal subtracted (duplicates; +/-SD).



Histone nuclear extracts were prepared from MDA-231 cells using the <u>Histone Extraction Kit (ab113476)</u> and the ODs generated from Histone H4 are measured.

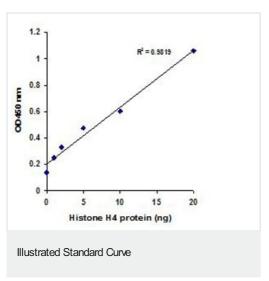


Figure 1. Illustrated standard curve generated with H4 standard.

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