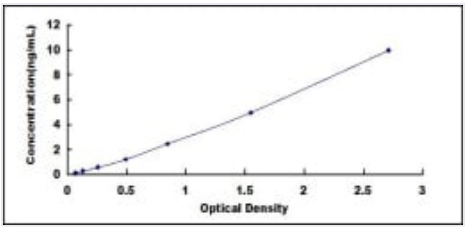
Histone H4 (H4) ELISA Kit for Human, Mouse, Rat

PRODUCT OVERVIEW

Product Name	Histone H4 (H4), ELISA Kit
Full Product Name	Multi-species Histone H4 (H4) ELISA Kit
Product Gene Name	H4 elisa kit
Product Synonym Names	Human/Mouse/Rat Histone H4 (H4) (Sandwich ELISA) ELISA Kit
Species Reactivity	Human, Mouse, Rat
Assay Type	Double-antibody Sandwich
Samples	Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids
Detection Range	0.156-10ng/mL
Sensitivity	0.061ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of Histone H4 (H4). No significant cross-reactivity or interference between Histone H4 (H4) and analogues was observed.
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Molecular Weight	11,367 Da
OMIM	142750
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Application	Enzyme-linked immunosorbent assay for Antigen Detection.
Intra-assay Precision (Precision within an assay)	3 samples with low, middle and high level Histone H4 (H4) were tested 20 times on one plate, respectively.
Inter-assay Precision (Precision between assays)	3 samples with low, middle and high level Histone H4 (H4) were tested on 3 different plates, 8 replicates in each plate.
CV(%) =	SD/meanX100
Intra-Assay	CV<10%
Inter-Assay	CV<12%
Product Categories/Family for H4 elisa kit	Signal transduction; Developmental science
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.

Related Product Information for H4 elisa kit	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Histone H4 (H4). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Histone H4 (H4). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Histone H4 (H4), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of Histone H4 (H4) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of H4 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for H4 purchase	MBS2024936 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Histone H4 (H4) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing H4. The ELISA analytical biochemical technique of the MBS2024936 kit is based on H4 antibody-H4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect H4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, H4. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of H4 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for H4. It may not necessarily be applicable to this product.

NCBI GI #	28173560
NCBI GeneID	121504
NCBI Accession #	NP_778224.1
UniProt Secondary Accession #	P02304; P02305; Q6DRA9; Q6FGB8; Q6NWP7; A2VCL0
UniProt Related Accession #	P62805
GenBank Nucleotide #	NM_175054.2
NCBI Official Full Name	histone H4
NCBI Official Synonym Full Names	histone cluster 4, H4
NCBI Official Symbol	HIST4H4
NCBI Official Synonym Symbols	H4/p
UniProt Protein Name	Histone H4
Protein Family	Antigen
UniProt Gene Name	HIST1H4A
UniProt Synonym Gene Names	H4/A; H4FA
UniProt Entry Name	H4_HUMAN

NCBI Protein Information	histone H4
NCBI Summary for H4	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. [provided by RefSeq, Aug 2015]
UniProt Comments for H4	H4: histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The gene encoding H4 is intronless. Protein type: DNA-binding Chromosomal Location of Human Ortholog: 6p22.2 Cellular Component: nucleoplasm; nuclear chromosome; protein complex; membrane; extracellular region; nucleosome; nucleus Molecular Function: protein binding; DNA binding; histone binding; protein heterodimerization activity Biological Process: chromatin silencing at rDNA; establishment and/or maintenance of chromatin architecture; DNA replication-dependent nucleosome assembly; regulation of gene expression, epigenetic; negative regulation of megakaryocyte differentiation; nucleosome assembly; DNA replication-independent nucleosome assembly at centromere; DNA replication-independent nucleosome assembly; negative regulation of gene expression, epigenetic; protein heterotetramerization; gene expression; mitotic cell cycle; telomere maintenance; DNA methylation on cytosine
Research Articles on H4	**1.** Data indicate that MEP50 WD repeat protein is essential for methylation of histones H4 and H2A by PRMT5 arginine methyltransferase.
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