Immunotag™ Histone H4 (Acetyl Lys12) Polyclonal Antibody

Antibody Specification

Catalog No.	ITM3305
Product Description	Immunotag™ Histone H4 (Acetyl Lys12) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Histone H4 (Lys12)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB
Recommended Dilution	WB: 1:1000-2000
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthetic Peptide of Histone H4 (Acetyl Lys12)
Specificity	The antibody detects endogenous Histone H3 (Acetyl Lys12) protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen
Form	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Gene Name	HIST1H4A
Accession No.	P62805 P62806 P62804
Alternate Names	HIST1H4A; H4/A; H4FA; HIST1H4B; H4/I; H4FI; HIST1H4C; H4/G; H4FG; HIST1H4D; H4/B; H4FB; HIST1H4E; H4/J; H4FJ; HIST1H4F; H4/C; H4FC; HIST1H4H; H4/H; H4FH; HIST1H4I; H4/M; H4FM; HIST1H4J; H4/E; H4FE; HIST1H4K; H4/D; H4FD; HIST1H4L; H4/K; H4FK; HIST2H4A; H4/N; H4F2; H4FN; HIST2H4; HIST2H4B; H4/O; H4FO; HIST4H4; Histone H4

Antibody Specification

Description	histone cluster 1 H4 family member i(HIST1H4I) Homo sapiens 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 linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order 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 but instead contain a palindromic termination element. This gene is found in the histone microcluster on chromosome 6p21.33. [provided by RefSeq, Aug 2015],
Cell Pathway/ Category	Systemic lupus erythematosus,
Protein Expression	B-cell lymphoma,Bone marrow,Brain,Clones donated by HIP,Corpus call
Subcellular Localization	nuclear chromosome,nuclear chromosome, telomeric region,nucleosome,extracellular region,nucleus,nucleoplasm,membrane,extracellular matrix,protein complex,extracellular exosome,
Protein Function	function: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.,PTM:Acetylation at Lys-6, Lys-9, Lys-13 and Lys-17 occurs in coding regions of the genome but not in heterochromatin.,PTM:Citrullination at Arg-4 by PADI4 impairs methylation.,PTM:Monomethylated, dimethylated or trimethylated at Lys-21. Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and induces gene silencing.,PTM:Monomethylation at Arg-4 by PRMT1 favors acetylation at Lys-9 and Lys-13. Demethylation is performed by JMJD6.,PTM:Sumoylated, which is associated with transcriptional repression.,PTM:Ubiquitinated by the CUL4-DDB-RBX1 complex in response to ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA accessibility to repair proteins.,similarity:Belongs to the histone H4 family.,subunit:The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.