

# Immunotag™ Histone H4 (Acetyl Lys12) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITK0013
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® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be returned and is not eligible for return.
Target Protein	Histone H4 (Lys12)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. Other applications: 1/100 - 1/1000.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Rabbit
Immunogen	Synthesized acetyl-peptide derived from Histone H4 (Acetyl Lys12), at AA range: 10-90
Specificity	Acetyl-Histone H4 (K12) Polyclonal Antibody detects endogenous levels of Histone H4 protein only when acetylated.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific resin.
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	HIST1H4A/HIST1H4B/HIST1H4C/HIST1H4D/HIST1H4E/HIST1H4F/HIST1H4H/HIST1H4I/HIST1H4J/HIST1H4K/HIST1H4L/HIST1H4M/HIST1H4N/HIST1H4O/HIST1H4P/HIST1H4Q/HIST1H4R/HIST1H4S/HIST1H4T/HIST1H4U/HIST1H4V/HIST1H4W/HIST1H4X/HIST1H4Y/HIST1H4Z
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/H; H4FH; HIST1H4I; H4/M; H4FM; HIST1H4J; H4/E; H4FE; HIST1H4K; H4/D; H4FD; HIST1H4L; H4/O; H4FO; HIST1H4M; H4/N; H4FN; HIST1H4O; H4/P; H4FO; HIST1H4P; H4/Q; H4FP; HIST1H4Q; H4/R; H4FR; HIST1H4R; H4/S; H4FS; HIST1H4S; H4/T; H4FT; HIST1H4T; H4/U; H4FU; HIST1H4U; H4/V; H4FV; HIST1H4V; H4/W; H4FW; HIST1H4W; H4/X; H4FX; HIST1H4X; H4/Y; H4FY; HIST1H4Y; H4/Z; H4FZ; HIST1H4Z; H4/A; H4FA; HIST1H4B; H4/I; H4FI; HIST1H4C; H4/G; H4FG; HIST1H4D; H4/B; H4FB; HIST1H4E; H4/H; H4FH; HIST1H4I; H4/M; H4FM; HIST1H4J; H4/E; H4FE; HIST1H4K; H4/D; H4FD; HIST1H4L; H4/O; H4FO; HIST1H4M; H4/N; H4FN; HIST1H4O; H4/P; H4FO; HIST1H4P; H4/Q; H4FP; HIST1H4Q; H4/R; H4FR; HIST1H4R; H4/S; H4FS; HIST1H4S; H4/T; H4FT; HIST1H4T; H4/U; H4FU; HIST1H4U; H4/V; H4FV; HIST1H4V; H4/W; H4FW; HIST1H4W; H4/X; H4FX; HIST1H4X; H4/Y; H4FY; HIST1H4Y; H4/Z; H4FZ; HIST1H4Z

## Antibody Specification

Description	histone cluster 1 H4 family member i(HIST1H4I) Homo sapiens Histones are basic nuclear proteins that structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The link between nucleosomes and functions in the compaction of chromatin into higher order structures. This is a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack a palindromic termination element. This gene is found in the histone microcluster on chromosome 6p21.
Cell Pathway/ Category	Protein_Acetylation
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,nuclear matrix,protein complex,extracellular exosome,
Protein Function	function:Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting machineries which require DNA as a template. Histones thereby play a central role in transcription regulation and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications and nucleosome remodeling.,PTM:Acetylation at Lys-6, Lys-9, Lys-13 and Lys-17 occurs in coding region of heterochromatin.,PTM:Citrullination at Arg-4 by PADI4 impairs methylation.,PTM:Monomethylated, dimeric Monomethylation is performed by SET8. Trimethylation is performed by SUV420H1 and SUV420H2 and silencing.,PTM:Monomethylation at Arg-4 by PRMT1 favors acetylation at Lys-9 and Lys-13. Demethylation by JMJD6.,PTM:Sumoylated, which is associated with transcriptional repression.,PTM:Ubiquitinated by the CUL5 complex after ultraviolet irradiation. This may weaken the interaction between histones and DNA and facilitate DNA access by other proteins.,similarity:Belongs to the histone H4 family.,subunit:The nucleosome is a histone octamer composed of two molecules of H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps DNA.
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.