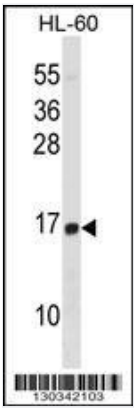
HIST1H2BD Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	HIST1H2BD, Polyclonal Antibody
Full Product Name	HIST1H2BD, NT (HIST1H2BD, H2BFB, HIRIP2, Histone H2B type 1-D, HIRA-interacting protein 2, Histone H2B.1 B, Histone H2B.b) (APC)
Product Gene Name	anti-HIST1H2BD antibody
Product Synonym Names	HIST1H2BD; H2BFB; HIRIP2; Histone H2B type 1-D; HIRA-interacting protein 2; Histone H2B.1 B; Histone H2B.b
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: APC conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	13,936 Da
Chromosome Location	Chromosome: 6; NC_000006.11 (26157419..26171577). Location: 6p21.3
OMIM	602799
3D Structure	ModBase 3D Structure for P58876
Immunogen	HIST1H2BD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HIST1H2BD.
Conjugate	APC
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-HIST1H2BD antibody	Antibodies; Histones
Applications Tested/Suitable for anti-HIST1H2BD antibody	Western Blot (WB), FLISA
Application Notes for anti-HIST1H2BD antibody	WB: 1:100-500 FLISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-HIST1H2BD antibody	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 member of the histone H2B family. Two transcripts that encode the same protein have been identified for this gene, which is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq].

Product References and Citations for anti-HIST1H2BD antibody	Kim, S.C., et al. Mol. Cell 23(4):607-618(2006). Beck, H.C., et al. Mol. Cell Proteomics 5(7):1314-1325(2006). Pavri, R., et al. Cell 125(4):703-717(2006). Bonenfant, D., et al. Mol. Cell Proteomics 5(3):541-552(2006). Siuti, N., et al. J. Proteome Res. 5(2):233-239(2006).
Other Notes	Small volumes of anti-HIST1H2BD antibody 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 HIST1H2BD purchase	MBS6306792 is an antibody targeting HIST1H2BD. Also known as HIST1H2BD, NT (HIST1H2BD, H2BFB, HIRIP2, Histone H2B type 1-D, HIRA-interacting protein 2, Histone H2B.1 B, Histone H2B.b) (APC). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-HIST1H2BD antibody
HIST1H2BD Antibody (N-term) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the HIST1H2BD antibody detected the HIST1H2BD protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HIST1H2BD. It may not necessarily be applicable to this product.

NCBI GI #	20336752
NCBI GeneID	3017
NCBI Accession #	NP_619790.1
NCBI Related Accession #	NP_066407.1
UniProt Primary Accession #	P58876
UniProt Related Accession #	P58876
GenBank Nucleotide #	NM_138720.2
NCBI Official Full Name	histone H2B type 1-D
NCBI Official Synonym Full Names	histone cluster 1, H2bd
NCBI Official Symbol	HIST1H2BD
NCBI Official Synonym Symbols	H2B/b; H2BFB; H2B.1B; HIRIP2; dJ221C16.6
UniProt Protein Name	Histone H2B type 1-D
UniProt Synonym Protein Names	HIRA-interacting protein 2; Histone H2B.1 B; Histone H2B.b
Protein Family	Histone
UniProt Gene Name	HIST1H2BD
UniProt Synonym Gene Names	H2BFB; HIRIP2; H2B/b
UniProt Entry Name	H2B1D_HUMAN

NCBI Protein Information	histone H2B type 1-D; histone H2B.b; histone 1, H2bd; histone H2B.1 B; HIRA-interacting protein 2; H2B histone family, member B
NCBI Summary for HIST1H2BD	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 member of the histone H2B family. Two transcripts that encode the same protein have been identified for this gene, which is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Jul 2008]
UniProt Comments for HIST1H2BD	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. Subunit structure: 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. Subcellular location: Nucleus. Chromosome. Post-translational modification: Monoubiquitination at Lys-35 (H2BK34Ub) by the MSL1/MSL2 dimer is required for histone H3 'Lys-4' (H3K4me) and 'Lys-79' (H3K79me) methylation and transcription activation at specific gene loci, such as HOXA9 and MEIS1 loci. Similarly, monoubiquitination at Lys-121 (H2BK120Ub) by the RNF20/40 complex gives a specific tag for epigenetic transcriptional activation and is also prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation. It also functions cooperatively with the FACT dimer to stimulate elongation by RNA polymerase II. H2BK120Ub also acts as a regulator of mRNA splicing: deubiquitination by USP49 is required for efficient cotranscriptional splicing of a large set of exons.Phosphorylation at Ser-37 (H2BS36ph) by AMPK in response to stress promotes transcription By similarity. Phosphorylated on Ser-15 (H2BS14ph) by STK4/MST1 during apoptosis; which facilitates apoptotic chromatin condensation. Also phosphorylated on Ser-15 in response to DNA double strand breaks (DSBs), and in correlation with somatic hypermutation and immunoglobulin class-switch recombination. Ref.7GlcNAcylation at Ser-113 promotes monoubiquitination of Lys-121. It fluctuates in response to extracellular glucose, and associates with transcribed genes By similarity.Crotonylation (Kcr) is specifically present in male germ cells and marks testis-specific genes in post-meiotic cells, including X-linked genes that escape sex chromosome inactivation in haploid cells. Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors. It is also associated with post-meiotically activated genes on autosomes. Ref.14 Miscellaneous: The mouse orthologous protein seems not to exist. Sequence similarities: Belongs to the histone H2B family.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/hist1h2bd/6306792