

Datasheet for 200-401-V35**HP1 alpha, beta, gamma Antibody****Overview**

Description:	Anti-HP1 alpha, beta, gamma (RABBBIT) Antibody - 200-401-V35
Item No.:	200-401-V35
Size:	50 µg
Applications:	WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	HP1 alpha, beta and gamma (UniProt/Swiss-Prot entry P45973, P83916 and Q13185) are components of heterochromatin. They recognize and bind histone H3 tails methylated at 'Lys-9', leading to epigenetic repression of transcription. HP1 alpha, beta and gamma also interact with lamin B receptor (LBR), thereby contributing to the association of heterochromatin with the innernuclear membrane. Anti-HP1 α , β , γ Antibody is ideal for research in Chromatin Remodeling and Epigenetics.
Synonyms:	Chromobox protein homolog 1, HP1Hsbeta, Heterochromatin protein 1 homolog beta, HP1-beta, Heterochromatin protein p25, M31, Modifier 1 protein, p25 beta
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CBX1
Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-HP1 α , β , γ Antibody was produced in rabbits by repeated immunization with a full length recombinant protein of human HP1 beta. The antibody also recognizes the alpha and gamma isoforms.

Purity/Specificity: Anti-HP1 alpha, beta, gamma Antibody was purified by Protein G chromatography. Cross-reactivity with HP1 α , β , G from species other than human has not been determined.

Relevant Links:

- [UniProtKB - P83916](#)
- [GeneID - 10951](#)
- [NCBI - NP_001120700](#)

Application Details

Tested Applications: WB

Application Note: Anti-HP1 α , β , g Antibody is tested in Western blot and suitable for Chromatin Immunoprecipitation and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 20 kDa (bands for the alpha, beta, and gamma isoforms are slightly different) in the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ChIP: 4 μ g/ChIP

IF: 1:500

WB: 1:1,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 2.0 μ g/ μ L by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.05% (w/v) Sodium Azide and 0.05% ProClin 300

Stabilizer: None

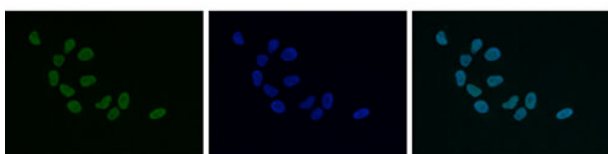
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

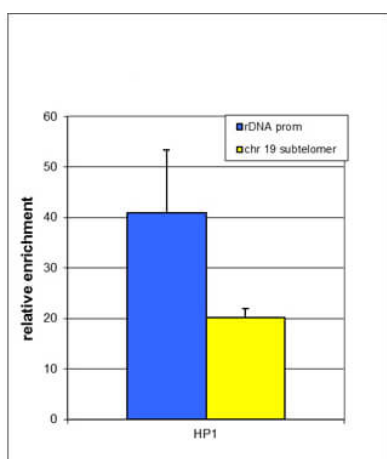
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy results of Rabbit anti-HP1 alpha, beta, gamma antibody. Tissue: HeLa cells. Fixation: 4% formaldehyde for 10 min. Block: PBS/Triton X-100/5% normal goat serum and 1% BSA. Primary antibody: (left) HP1 alpha, beta, gamma antibody at 1:500 for 1 hr at RT. Secondary antibody: anti-rabbit Alexa 488 secondary antibody at 1:10,000 for 45 min at RT. Staining: HP1 alpha, beta, gamma antibody as green fluorescent signal (left) with DAPI blue (middle), and a merge of the two stainings (right).

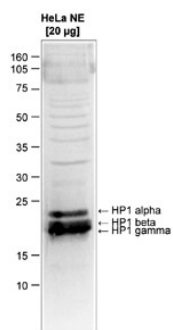


ChIP

Chromatin Immunoprecipitation Rabbit Anti-HP1 alpha, beta, gamma Antibody. ChIP assays were performed using NIH3T3 cells and 4 µg of Rabbit Anti-HP1α, β and γ Antibody. qPCR was performed on the IP'd DNA with optimized primer sets for the rDNA promoter and for a subtelomeric sequence of chromosome 19. This figure shows the relative enrichment as compared to a no antibody negative control ChIP.

Western Blot

Western Blot results of Rabbit anti-HP1 alpha, beta, gamma antibody. Lane 1: 20 µg HeLa nuclear extracts. Primary antibody: Rabbit anti-HP1 alpha, beta, gamma antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: TBS-Tween containing 5% BLOTTO. Predicted/Observed size: ~21 kDa for HP1 alpha, beta, gamma.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.