

**#5313** Store at -20°C

# RBPSUH (D10A4) XP® Rabbit mAb


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TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P, ChIP	H M R Mk	Endogenous	61	Rabbit IgG	#Q06330	3516

## Product Usage Information

For optimal ChIP results, use 10 µl of antibody and 10 µg of chromatin (approximately 4 x 10<sup>6</sup> cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

Application	Dilution
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:2600
Chromatin IP	1:50

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

RBPSUH (D10A4) XP® Rabbit mAb recognizes endogenous levels of total RBPSUH protein.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln110 of human RBPSUH protein.

## Background

RBPSUH (Recombining Binding Protein, **S**uppressor of **H**airless), also termed RBP-J or CSL, is the DNA-binding component of the transcription complex regulated by canonical Notch signaling. In the absence of Notch activation, RBPSUH suppresses target gene expression through interactions with a co-repressor complex containing histone deacetylase. Upon activation of Notch receptors, the Notch intracellular domain (NICD) translocates to the nucleus and binds to RBPSUH. This displaces the co-repressor complex and replaces it with a transcription activation complex that includes Mastermind-like (MAML) proteins and histone acetylase p300, leading to transcriptional activation of Notch target genes (1-3). RBPSUH is also the DNA-binding partner for Epstein-Barr virus (EBV) nuclear antigen 2 (EBNA2), a protein critical for latent viral transcription and immortalization of EBV-infected B cells (4,5).

## Background References

1. Ehebauer, M. et al. (2006) *Sci STKE* 2006, cm7.
2. Borggreffe, T. and Oswald, F. (2009) *Cell Mol Life Sci* 66, 1631-46.
3. Kopan, R. and Ilgan, M.X. (2009) *Cell* 137, 216-33.
4. Henkel, T. et al. (1994) *Science* 265, 92-5.
5. Strobl, L.J. et al. (1997) *Immunobiology* 198, 299-306.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**WB:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **ChIP:** Chromatin IP

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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