

# Broad Institute - Encode3 Secondary Antibody Validation

## Bethyl Labs A300-489A Lot 2

### Target: ASH2L

Approved name: ASH2 like histone lysine methyltransferase complex subunit

Function: Participates in a complex which achieves epigenetic transcriptional repression or activation associated with histone methylation.

Member of complex: ASH2L is a component of MLL complexes, which are responsible for the activating methylation of Histone H3 at position K4.

Other complex members: RbBP5, WDR5, KMTs (lysine methyltransferase proteins)

#### References:

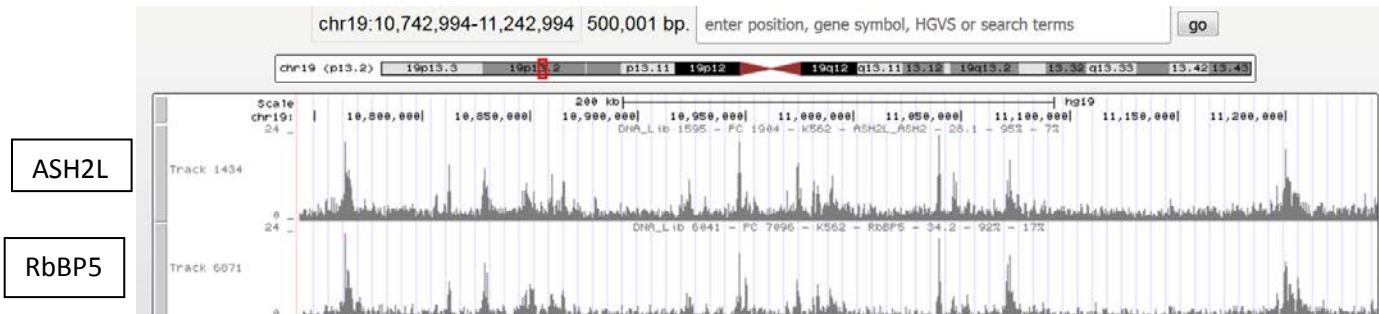
1. Nat Struct Mol Bio. 2006. 13(9):852-4. Molecular regulation of H3K4 trimethylation by ASH2L, a shared subunit of MLL complexes. Steward MM, Lee JS, O'Donovan A, Wyatt M, Bernstein BE, Shilatifard A. [PMID: 16892064](#)

#### Antibody being validated:

1. Bethyl Labs A300-489A Lot 2 [Rabbit polyclonal, affinity purified]
2. Broad Alias: PchAb 42-V
3. Immunogen: Between residue 575 and C-term.
4. <https://www.encodeproject.org/antibodies/ENCAB947YBH/>

This validation relies on the use of antibodies to different members of a known complex, in GM12878 cells, and the demonstration that highly similar patterns of enrichment are obtained with each antibody. The first track shown used an antibody to ASH2L (PchAb 42-V), and the second track shown used an antibody to RbBP5 (PchAb 153-V), another member of the histone methyltransferase complex.

Overall correlation score: 0.8600



Antibody being compared (RbBP5):

1. Bethyl Labs A300-109A Lot 2 [Rabbit polyclonal, affinity purified]
2. Broad Alias: PchAb 153-V
3. Immunogen: Between residue 500 and C-term.
4. <https://www.encodeproject.org/antibodies/ENCAB000AKH/>