

Broad Institute - Encode3 Secondary Antibody Validation

Bethyl-Labs A301-772A Lot: A301-772A-1

Target: PHF8

Approved name: PHD finger protein 8

Function: Preferentially demethylates histones that are methylated at lysine residues. The encoded protein requires Fe(2+) ion, 2-oxoglutarate, and oxygen for its catalytic activity.

Reference:

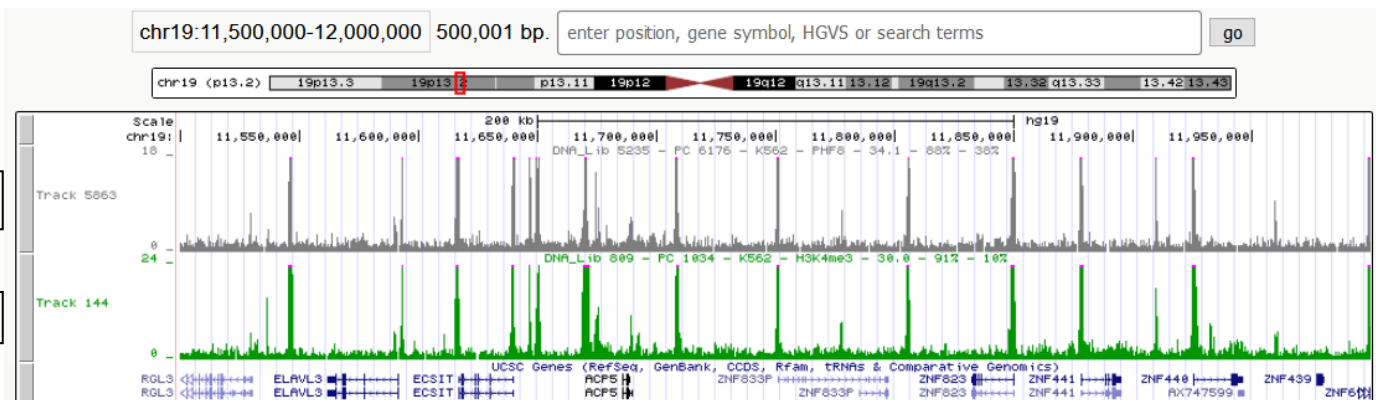
1. Cell Res. 2010 **8**:861-2. Features of the PHF8/KIAA1718 histone demethylase. Suganuma, T, Workman, JL. [PMID: 20644565](https://pubmed.ncbi.nlm.nih.gov/20644565/)

Antibody being validated:

1. Bethyl-Labs A301-772A Lot: A301-772A-1 (rabbit polyclonal)
2. Broad Alias: PchAb 377
3. Immunogen: KLH-conjugated linear peptide corresponding to human PHD finger protein 8.
4. <https://www.encodeproject.org/antibodies/ENCAB000AJX/>

This validation relies on the use of antibodies to a chromatin regulator and a functionally related histone modification in K562 cells, and the demonstration that highly similar patterns of enrichment are obtained with each antibody. The first track shown used an antibody to PHF8 (PchAb 377, ENCAB000AJX), and the second track shown used an antibody to H3K4me3 previously characterized to Encode standards (PchAb 99-V, ENCAB000BLE).

Overall correlation score: 0.889



Antibody being compared:

1. Millipore #07-473 Lot DAM1623866 (rabbit polyclonal)
2. Broad Alias: PchAb 99-V

3. Immunogen: Synthetic peptide corresponding to residues surrounding and including trimethylated Lys 4 of Histone H3
4. <https://www.encodeproject.org/antibodies/ENCAB000BLE/>