

Broad Institute - Encode3 Secondary Antibody Validation

Bethyl # A300-215A Lot A300-215A-1

Target: KDM1A [LSD1]

Approved name: lysine demethylase 1A

Function: Demethylates histone H3 at K4 and at K9.

Member of complex: KDM1A is a member of complexes that include histone deacetylases, HDAC1 and HDAC2, such as the NuRD complex (HDAC1,2; MTA1,2; CHD4). Reference: LSD1 Is a Subunit of the NuRD Complex and Targets the Metastasis Programs in Breast Cancer. Wang Y et al, Cell **138**, 660-672 (2009). [PMID: 19703393](https://pubmed.ncbi.nlm.nih.gov/19703393/).

Other complex members: HDAC1, HDAC2, CHD4

Antibody being validated:

1. Bethyl # A300-215A Lot A300-215A-1 (rabbit polyclonal)
2. Broad Alias: PchAb 158.
3. Immunogen: peptide from between residues 50 and 100.
4. <https://www.encodeproject.org/antibodies/ENCAB000AIH/>

This validation relies on the use of antibodies to different members of a known complex, and the demonstration that highly similar patterns of enrichment are obtained with each antibody. The second track shown used an antibody to CHD4 (PchAb 1222), another member of the NuRD complex.

Overall correlation score: 0.8585.

