Secondary antibody validation

Validation method: ChIP-ChIP comparison using a previously validated antibody.

Antibody being validated: ENCAB000BKT

Target: H3K36me3

Vendor: Abcam

Part number: ab9050

Lot number: 446805

Broad Alias: PchAb 457

This antibody is being validated by comparison to ENCAB000ADU (Broad alias PchAb 78-V).

Cell type for both tracks: K562 cells.

Pearson correlation score: 0.902372.



Upper track: old antibody: Abcam ab9050 lot # 499302.

Lower track: new antibody: Abcam ab9050 lot # 446805.

Specific method used: We used Pearson Correlation to compare the two tracks. Metrics were derived as follows: (1) *Genomic windows for validation test:* We collated a set of 15,157 3KB genomic windows whose ChIP-seq signals vary between histone marks and cell types, based on a manually curated set of ~1000 ChIP-seq experiments (data from the Encode2 and NIH Roadmap Epigenomics projects [URL here]). The genomic coordinates of these 15,157 3KB windows are available <u>here</u>. For the current validation exercise, we excluded 500 windows with false-positive constitutive signals across marks and input controls. (2) *Antibody validation test:* For each of the two ChIP-seq experiments, numerical values corresponding to normalized read density for each window were calculated. The Pearson correlation between both the two tracks was computed using the retained 14,657 genomic intervals and is reported above.