ENCODE DCC Antibody Validation Document

Date of Submission: 9/13/12

Name: Trupti Kawli

Email: trupti@stanford.edu

Lab: Snyder

Antibody Name: Anti-SMC3 antibody - ChIP Grade

Target: SMC3

Company/ Source: Abcam

Catalog Number, database ID, laboratory: ab9263

Lot Number: 963667

Antibody Description: Synthetic peptide (Human) conjugated to KLH - which represents a portion within the last 100 amino acids of the human Structural Maintenance of Chromosomes-3 (GenBank PID 4885399), conjugated to KLH.

Target Description: This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to the secreted proteoglycan bamacan, an abundant basement membrane protein. (provided by RefSeq)

Species Target: Mouse

Species Host: Rabbit

Validation Method #1: Immunoprecipitation

Validation Method #2: ChIP

Purification Method: Affinity

Polyclonal/ Monoclonal: Polyclonal

Vendor URL:

Reference (PI/ Publication Information):

Please complete the following for antibodies to histone modifications:

if your specifications are not listed in the drop-down box, please write-in the appropriate information

Histone Name | AA modified | AA Position | Modification

Validation #1
Analysis

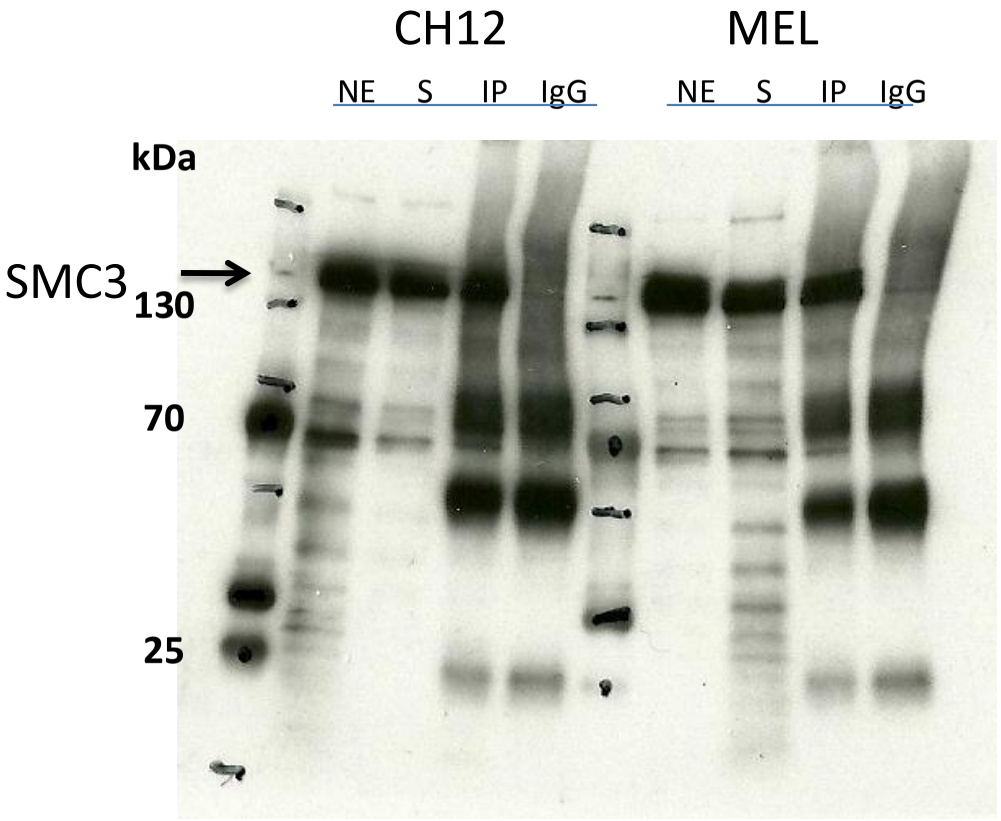
A band consistent with the expected size of SMC3 (~145 kD) is efficiently immunoprecipitated from a CH12 and MEL nuclear lysate using antibody ab9263. This antibody ans been validated for human cell lines using immunoprecipitation and ChIP.

Insert Validation Image (click here)

Antibody: SMC3 Source: Abcam ab9263

Epitope: NELF-E Antibody is rabbit polyclonal IgG, epitope corresponding to last 100 amino acids of the human SMC3

Validation 1: Immunoprecipitation (IP) in both CH12 and MEL cell lines



Arrow indicates immunoprecipitated band of expected size of SMC3 in both CH12 and MEL cell lines (~145 kDa).

NE: nuclear extract
S: supernatant after IP
IP: IP with tested antibody
IgG: IP with control IgG

Validation #2 Analysis	The antibody ab9263 has been validated by ChIP-Seq for human cell lines. Please see validation documents for human cell lines for details.

Insert Validation Image (Click here)