

ENCODE DCC ANTIBODY VALIDATION DOCUMENT

Date of Submission: 6/22/11

Name: Zarmik Moqtaderi

Email: Zarmik@hms.harvard.edu

Lab: Struhl

Antibody Name: SIRT6

Target: SIRT6

Company/Source: Abcam ab48192

Catalog number or laboratory database ID: ab48192

Lot Number:

Antibody Description:

A synthetic peptide made to an internal region of the human SIRT6 protein

Target Description: Sirtuin 6, NAD dependent protein deacetylase of the Sir2 family

Target Species: Human

Host Species: Rabbit

Validation Method 1:

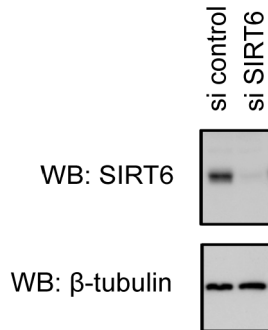
Validation Method 2:

Purification Method:

Polyclonal/Monoclonal: Polyclonal

Reference: Michishita et al, Molecular Biology of the Cell, 16, 4623– 4635 (2005)

First, siRNA mediated RNA interference abolishes SIRT6 SPK antibody signal by Western analysis as shown here:



Second, numerous publications have established the specificity of this antibody by loss of signal in response to siRNAs, including:

1. Michishita et al, *Molecular Biology of the Cell*, 16, 4623– 4635 (2005)
2. Michishita et al, *Nature* 452, 492-6 (2008)
3. Kawahara et al, *Cell* 136: 62-74 (2009)
4. McCord et al, *Aging* 1: 109-121 (2009)
5. Michishita et al, *Cell Cycle* 8: 2664-6 (2009)

In particular, SIRT6 antibody ChIP signal at telomeres is abolished by RNAi knock-down. See especially Michishita et al (2008), *Nature* 452: 492-6, Figure 2d, copied here. Anti-SIRT6: SIRT6 ChIP; IgG: control ChIP; pSR: control cells; S6KD: SIRT6-depleted cells.

