## SANTA CRUZ BIOTECHNOLOGY, INC.

# NEIL2 (H-41): sc-135243



### BACKGROUND

NEIL1, NEIL2 and NEIL3, also known as endonuclease VIII-like 1, 2 and 3 or DNA-(apurinic or apyrimidinic site) lyase NEIL 1, 2 and 3, are nuclear proteins involved in the repair of DNA damaged by oxidation. The NEIL proteins belong to the FPG family of proteins. They act as DNA glycosylases that can recognize and remove damaged bases, leaving an abasic site. NEIL3, however, lacks the proline residue at the N-terminus which acts as the active site residue found in NEIL1 and NEIL2. NEIL1 is a ubiquitiously expressed protein that is upregulated during S phase. NEIL2 is expressed primarily in testis, heart, skeletal muscle, placenta, brain, kidney and liver while NEIL3 is detected primarily in thymus and testis.

## CHROMOSOMAL LOCATION

Genetic locus: NEIL2 (human) mapping to 8p23.1; Neil2 (mouse) mapping to 14 D1.

## SOURCE

NEIL2 (H-41) is a rabbit polyclonal antibody raised against amino acids 135-175 mapping within an internal region of NEIL2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-135243 X, 200  $\mu$ g/0.1 ml.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

NEIL2 (H-41) is recommended for detection of NEIL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NEIL2 (H-41) is also recommended for detection of NEIL2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for NEIL2 siRNA (h): sc-61168, NEIL2 siRNA (m): sc-61169, NEIL2 shRNA Plasmid (h): sc-61168-SH, NEIL2 shRNA Plasmid (m): sc-61169-SH, NEIL2 shRNA (h) Lentiviral Particles: sc-61168-V and NEIL2 shRNA (m) Lentiviral Particles: sc-61169-V.

NEIL2 (H-41) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

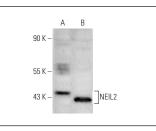
Molecular Weight of NEIL2: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



NEIL2 (H-41): sc-135243. Western blot analysis of NEIL2 expression in HeLa (A) and NIH/3T3 (B) whole cell lysates.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

