

NEIL3 (2627C1b): sc-81331

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. 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. Thus, reports of NEIL3 DNA glycosylase activity are contradictory. NEIL3 localizes to the nucleus and only demonstrates expression in thymus and testis tissues. The deduced 605 amino acid NEIL3 protein contains one FPG-type zinc finger and one RanBP2-type zinc finger.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NEIL3 (human) mapping to 4q34.3.

SOURCE

NEIL3 (2627C1b) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of NEIL3 of human origin.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

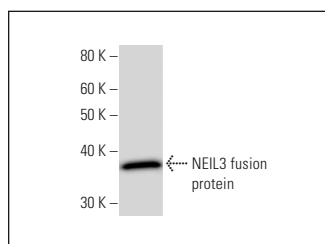
APPLICATIONS

NEIL3 (2627C1b) is recommended for detection of NEIL3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for NEIL3 siRNA (h): sc-61170, NEIL3 shRNA Plasmid (h): sc-61170-SH and NEIL3 shRNA (h) Lentiviral Particles: sc-61170-V.

Molecular Weight of NEIL3: 68 kDa.

DATA



NEIL3 (2627C1b): sc-81331. Western Blot analysis of human recombinant NEIL3 fusion protein.

RESEARCH USE

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

PROTOCOLS

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