



DinB (E-20): sc-51065

BACKGROUND

Problems in DNA replication may lead to breaks in the replication fork, and recombinational reactions occur to restore the integrity of the fork via strand-invasion of the broken chromosome with its homologous strand. If this happens within repeated DNA sequences, genetic rearrangements may be produced. The bacterial UmuC/DinB family consists of bypass polymerases that are responsible for translesion DNA synthesis. DinB, also referred to as DNA polymerase κ , is an SOS-inducible, error-prone DNA polymerase that plays a role in DNA damage-induced mutagenesis by preferentially making frameshift mutations. DinB is uniquely and highly expressed in the adrenal cortex and testis, as well as in a variety of other tissues. p53 regulates DinB and exposure to various DNA-damaging agents causes an upregulation of DinB.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POLK (human) mapping to 5q13; Polk (mouse) mapping to 13 D1.

SOURCE

DinB (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DinB of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51065 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-51065 X, 200 μ g/0.1 ml.

APPLICATIONS

DinB (E-20) is recommended for detection of all DinB isoforms of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for DinB siRNA (m): sc-60538.

DinB (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.