

# Hus1 (S-21): sc-30542

## BACKGROUND

DNA damage or incomplete replication of DNA results in inhibition of cell cycle progression at the G<sub>1</sub>-S or G<sub>2</sub>-M checkpoints by conserved regulatory mechanisms. Chk1, Rad9 and Hus1 are involved in regulation of cell cycle arrest at the G<sub>2</sub> checkpoint. Chk1 functions as an essential component in the G<sub>2</sub> DNA damage checkpoint by phosphorylating Cdc25C in response to DNA damage, which inhibits mitosis. Hus1 and Rad9 exhibit conserved function in fission yeast and higher eukaryotes. Hus1 has been shown to be phosphorylated in response to DNA damage, a process which requires rad checkpoint genes. Rad9 is thought to be a candidate tumor suppressor gene because it is localized to human chromosome 11q13.1-13.2, which is a region containing a number of tumor suppressor loci.

## CHROMOSOMAL LOCATION

Genetic locus: HUS1 (human) mapping to 7p12.3; Hus1 (mouse) mapping to 11 A1.

## SOURCE

Hus1 (S-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Hus1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-30542 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Hus1 (S-21) is recommended for detection of Hus1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Hus1 (S-21) is also recommended for detection of Hus1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Hus1 siRNA (h): sc-37545, Hus1 siRNA (m): sc-37546, Hus1 shRNA Plasmid (h): sc-37545-SH, Hus1 shRNA Plasmid (m): sc-37546-SH, Hus1 shRNA (h) Lentiviral Particles: sc-37545-V and Hus1 shRNA (m) Lentiviral Particles: sc-37546-V.

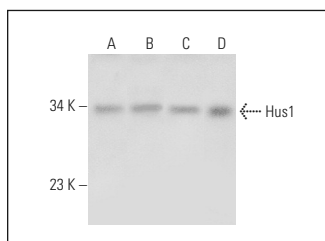
Molecular Weight of Hus1: 34 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



Hus1 (S-21): sc-30542. Western blot analysis of Hus1 expression in K-562 (A), HeLa (B), HEK293 (C) and Jurkat (D) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Hus1 (G-3): sc-166440**, our highly recommended monoclonal alternative to Hus1 (S-21).