

# Sp8 (H-50): sc-98511

## BACKGROUND

Sp8, also known as BTD, is a 508 amino acid nuclear protein that contains 3 C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Existing as multiple alternatively spliced isoforms, Sp8 plays a crucial role in limb outgrowth and neuropore closure and is thought to mediate apical ectodermal ridge (AER) formation. The gene encoding Sp8 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders, including cases of acute myelogenous leukemia and myelodysplasia.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SP8 (human) mapping to 7p21.1; Sp8 (mouse) mapping to 12 F2.

## SOURCE

Sp8 (H-50) is a rabbit polyclonal antibody raised against amino acids 233-280 mapping within an internal region of Sp8 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.

## APPLICATIONS

Sp8 (H-50) is recommended for detection of Sp8 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).

Sp8 (H-50) is also recommended for detection of Sp8 in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for SP8 siRNA (h): sc-89539, Sp8 siRNA (m): sc-153692, SP8 shRNA Plasmid (h): sc-89539-SH, Sp8 shRNA Plasmid (m): sc-153692-SH, SP8 shRNA (h) Lentiviral Particles: sc-89539-V and Sp8 shRNA (m) Lentiviral Particles: sc-153692-V.

Molecular Weight of Sp8: 51 kDa.

## 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ 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](http://www.scbt.com) or our catalog for detailed protocols and support products.