

# ZSWIM7 (D-14): sc-136956

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZSWIM7 (zinc finger SWIM domain-containing protein 7), also known as SWS1 (SWIM domain-containing and Srs2-interacting protein 1 homolog), is a 140 amino acid nuclear protein that contains a SWIM-type zinc finger and belongs to the SWS1 family. ZSWIM7 interacts with Rad51D, and plays a role in the early stages of the homologous recombination repair (HRR) pathway that occurs during double-stranded DNA breaks. The gene encoding ZSWIM7 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZSWIM7 (human) mapping to 17p12; Zswim7 (mouse) mapping to 11 B2.

## SOURCE

ZSWIM7 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZSWIM7 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-136956 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZSWIM7 (D-14) is recommended for detection of ZSWIM7 of mouse and human 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); non cross-reactive with other ZSWIM family members.

ZSWIM7 (D-14) is also recommended for detection of ZSWIM7 in additional species, including equine.

Suitable for use as control antibody for ZSWIM7 siRNA (h): sc-106973, ZSWIM7 siRNA (m): sc-155848, ZSWIM7 shRNA Plasmid (h): sc-106973-SH, ZSWIM7 shRNA Plasmid (m): sc-155848-SH, ZSWIM7 shRNA (h) Lentiviral Particles: sc-106973-V and ZSWIM7 shRNA (m) Lentiviral Particles: sc-155848-V.

Molecular Weight of ZSWIM7: 15 kDa.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.