

# ZSWIM8 (A-20): sc-243170

## BACKGROUND

KIAA0913 is a 1,837 amino acid protein that contains one SWIM-type zinc finger and is post-translationally phosphorylated at serine residues 567, 1040 and 1042. KIAA0913 exists as five alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 10. Chromosome 10 contains over 800 genes and 135 million nucleotides, which makes up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome, which is characterized by extreme photosensitivity and premature aging. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10. As with most trisomies, trisomy 10 is rare and is deleterious. The KIAA0913 gene product and its mouse homolog, Z310021P13Rik, have been provisionally designated KIAA0913 and Z310021P13Rik, respectively, pending further characterization.

## REFERENCES

1. Troelstra, C., et al. 1992. Localization of the nucleotide excision repair gene ERCC6 to human chromosome 10q11-q21. *Genomics* 12: 745-749.
2. Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. *Nat. Genet.* 8: 275-279.
3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
4. Olsen, J.V., et al. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. *Cell* 127: 635-648.
5. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.

## CHROMOSOMAL LOCATION

Genetic locus: ZSWIM8 (human) mapping to 10q22.2; Zswim8 (mouse) mapping to 14 A3.

## SOURCE

ZSWIM8 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZSWIM8 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-243170 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

ZSWIM8 (A-20) is recommended for detection of ZSWIM8 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).

ZSWIM8 (A-20) is also recommended for detection of ZSWIM8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZSWIM8 siRNA (h): sc-90772, ZSWIM8 siRNA (m): sc-108673, ZSWIM8 shRNA Plasmid (h): sc-90772-SH, ZSWIM8 shRNA Plasmid (m): sc-108673-SH, ZSWIM8 shRNA (h) Lentiviral Particles: sc-90772-V and ZSWIM8 shRNA (m) Lentiviral Particles: sc-108673-V.

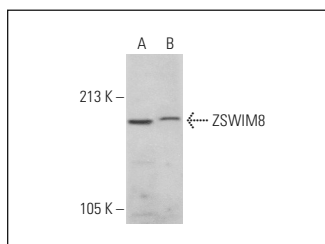
Molecular Weight of ZSWIM8: isoforms: 202/198/197/196 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## 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



ZSWIM8 (A-20): sc-243170. Western blot analysis of ZSWIM8 expression in Jurkat (A) and K-562 (B) 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.