

ZSWIM8 (G-5): sc-514204

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.

CHROMOSOMAL LOCATION

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

SOURCE

ZSWIM8 (G-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1674-1700 near the C-terminus of ZSWIM8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZSWIM8 (G-5) is available conjugated to agarose (sc-514204 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514204 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514204 PE), fluorescein (sc-514204 FITC), Alexa Fluor® 488 (sc-514204 AF488), Alexa Fluor® 546 (sc-514204 AF546), Alexa Fluor® 594 (sc-514204 AF594) or Alexa Fluor® 647 (sc-514204 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514204 AF680) or Alexa Fluor® 790 (sc-514204 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ZSWIM8 (G-5) is recommended for detection of ZSWIM8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

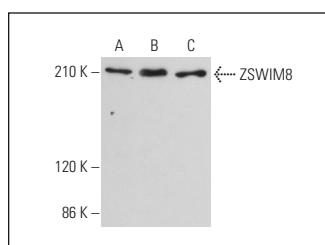
Molecular Weight of ZSWIM8 isoforms: 202/198/197/196 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or MES-SA/Dx5 cell lysate: sc-2284.

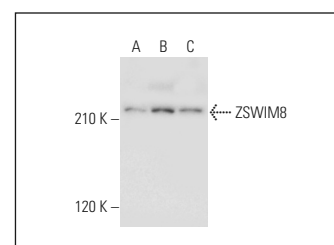
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZSWIM8 (G-5): sc-514204. Western blot analysis of ZSWIM8 expression in K-562 (A), SK-MEL-28 (B) and JAR (C) whole cell lysates.



ZSWIM8 (G-5): sc-514204. Western blot analysis of ZSWIM8 expression in Jurkat (A), K-562 (B) and MES-SA/Dx5 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Reches, A., et al. 2020. A unique regulation region in the 3' UTR of HLA-G with a promising potential. *Int. J. Mol. Sci.* E-published.

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.