

# BZW1 (S-14): sc-102355

## BACKGROUND

BZW1 (basic leucine zipper and W2 domains 1), also known as BZAP45, is a 419 amino acid member of the BZW family that contains one W2 domain and enhances histone H4 gene transcription. Existing as two alternatively spliced isoforms, BZW1 is expressed in day 3 embryos and is encoded by a gene that maps to human chromosome 2q33.1. Chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene.

## REFERENCES

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- Mitra, P., et al. 2001. Purification and functional analysis of a novel leucine-zipper/nucleotide-fold protein, BZAP45, stimulating cell cycle regulated histone H4 gene transcription. *Biochemistry* 40: 10693-10699.
- Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.
- Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. *Nat. Genet.* 31: 79-83.
- Kelsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. *Am. J. Hum. Genet.* 76: 794-803.
- Li, S., et al. 2009. BZW1, a novel proliferation regulator that promotes growth of salivary mucoepidermoid carcinoma. *Cancer Lett.* 284: 86-94.

## CHROMOSOMAL LOCATION

Genetic locus: BZW1 (human) mapping to 2q33.1; Bzw1 (mouse) mapping to 1 C1.3.

## SOURCE

BZW1 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BZW1 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-102355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BZW1 (S-14) is recommended for detection of BZW1 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).

BZW1 (S-14) is also recommended for detection of BZW1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BZW1 siRNA (h): sc-94750, BZW1 siRNA (m): sc-141797, BZW1 shRNA Plasmid (h): sc-94750-SH, BZW1 shRNA Plasmid (m): sc-141797-SH, BZW1 shRNA (h) Lentiviral Particles: sc-94750-V and BZW1 shRNA (m) Lentiviral Particles: sc-141797-V.

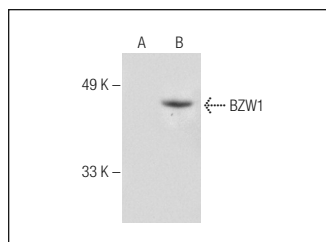
Molecular Weight of BZW1: 48 kDa.

Positive Controls: BZW1 (m): 293T Lysate: sc-118883 or BZW1 (h): 293T Lysate: sc-171798.

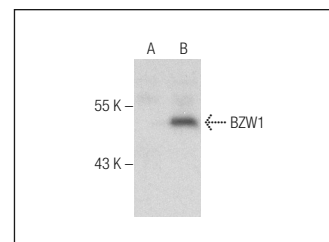
## RECOMMENDED SECONDARY REAGENTS

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 Blotting 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



BZW1 (S-14): sc-102355. Western blot analysis of BZW1 expression in non-transfected: sc-117752 (A) and mouse BZW1 transfected: sc-118883 (B) 293T whole cell lysates.



BZW1 (S-14): sc-102355. Western blot analysis of BZW1 expression in non-transfected: sc-117752 (A) and human BZW1 transfected: sc-171798 (B) 293T whole cell lysates.

## 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.