**BACKGROUND**

Polycomb group (PcG) proteins are important for maintaining the transcriptionally repressed state of target genes and are thought to function via chromatin modification. SCMH1 (sex comb on midleg homolog 1), also known as Scml3, is a mammalian homolog of the *Drosophila* Scm protein and is expressed in testis where it is thought to play a role in germ cell maturation and male reproduction. Multiple isoforms of SCMH1 exist due to alternative splicing events. The gene encoding SCMH1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson’s disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SCMH1 (human) mapping to 1p34.2.

**SOURCE**

SCMH1 (7-RY14) is a mouse monoclonal antibody raised against recombinant SCMH1 protein of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

SCMH1 (7-RY14) is recommended for detection of SCMH1 of 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]) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for SCMH1 siRNA (h): sc-78927, SCMH1 shRNA Plasmid (h): sc-78927-SH and SCMH1 shRNA (h) Lentiviral Particles: sc-78927-V.

Molecular Weight of SCMH1: 83 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

**DATA**

![SCMH1 Western blot analysis](image-url)

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.