SANTA CRUZ BIOTECHNOLOGY, INC.

HORMAD1 (C-17): sc-82188



BACKGROUND

HORMAD1 (HORMA domain containing 1), also known as NOHMA (newborn ovary HORMA protein) or CT46 (cancer/testis antigen 46), is a 394 amino acid testis-specific protein. HORMAD1 contains one HORMA (Hop1p, Rev7p and MAD2) domain (a domain involved in chromatin binding) that makes up the entire full-length sequence of the protein. Proteins with HORMA domains are typically involved in modulating chromatin dynamics and structure. The HORMA domain is believed to act as an adaptor, recruiting other proteins to chromatin states that result from nonattachment to the mitotic spindle or from DNA double-strand breaks. HORMAD1 is a putative meiotic protein, as is suggested by its 25.8% homology with the yeast protein Hop1 (a meiosis-specific protein). In addition, HORMAD1 is overexpressed in a variety of carcinomas, including breast, lung, endometrial, colon, bladder and esophageal cancers.

REFERENCES

- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609824. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Pangas, S.A., Yan, W., Matzuk, M.M. and Rajkovic, A. 2004. Restricted germ cell expression of a gene encoding a novel mammalian HORMA domain-containing protein. Gene Expr. Patterns 5: 257-263.
- Chen, Y.T., Venditti, C.A., Theiler, G., Stevenson, B.J., Iseli, C., Gure, A.O., Jongeneel, C.V., Old, L.J. and Simpson, A.J. 2005. Identification of CT46/ HORMAD1, an immunogenic cancer/testis antigen encoding a putative meiosis-related protein. Cancer Immun. 5: 9.
- Aung, P.P., Oue, N., Mitani, Y., Nakayama, H., Yoshida, K., Noguchi, T., Bosserhoff, A.K. and Yasui, W. 2006. Systematic search for gastric cancerspecific genes based on SAGE data: melanoma inhibitory activity and matrix metalloproteinase-10 are novel prognostic factors in patients with gastric cancer. Oncogene 25: 2546-2557.
- Adélaïde, J., Finetti, P., Bekhouche, I., Repellini, L., Geneix, J., Sircoulomb, F., Charafe-Jauffret, E., Cervera, N., Desplans, J., Parzy, D., Schoenmakers, E., Viens, P., Jacquemier, J., Birnbaum, D., Bertucci, F. and Chaffanet, M. 2007. Integrated profiling of basal and luminal breast cancers. Cancer Res. 67: 11565-11575.

CHROMOSOMAL LOCATION

Genetic locus: HORMAD1 (human) mapping to 1q21.3.

SOURCE

HORMAD1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HORMAD1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82188 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HORMAD1 (C-17) is recommended for detection of HORMAD1 of 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).

HORMAD1 (C-17) is also recommended for detection of HORMAD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HORMAD1 siRNA (h): sc-75273, HORMAD1 shRNA Plasmid (h): sc-75273-SH and HORMAD1 shRNA (h) Lentiviral Particles: sc-75273-V.

Molecular Weight of HORMAD1: 45 kDa.

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

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) Immunofluo-rescence: 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **HORMAD1 (GG-Y): sc-101235**, our highly recommended monoclonal alternative to HORMAD1 (C-17).