SANTA CRUZ BIOTECHNOLOGY, INC.

HE4 (T-20): sc-27577

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HE4 (whey acidic protein (WAP)-type four-disulfide core-2, WFDC2) is a small secretory protein that may influence sperm maturation. HE4 gene expression is high in pulmonary epithelial cells and in some ovarian cancers. HE4 protein has a WAP motif that contains eight cysteines forming four disulfide bonds at the core of the protein. The WAP motif functions as a protease inhibitor in many of the family members that contain them.

REFERENCES

1. Kirchhoff, C., et al. 1991. A major human epididymis-specific cDNA encodes a protein with sequence homology to extracellular proteinase inhibitors. Biol. Reprod. 45: 350-357.
2. Bingle, L., et al. 2002. The putative ovarian tumour marker gene HE4 (WFDC2), is expressed in normal tissues and undergoes complex alternative splicing to yield multiple protein isoforms. Oncogene 21: 2768-2773.
3. Hellstrom, I., et al. 2003. The HE4 (WFDC2) protein is a biomarker for ovarian carcinoma. Cancer Res. 63: 3695-3700.
4. Hagiwara, K., et al. 2003. Mouse SWAM1 and SWAM2 are antibacterial proteins composed of a single whey acidic protein motif. J. Immunol. 170: 1973-1979.
5. Urban, N., et al. 2003. Ovarian cancer screening. Hematol. Oncol. Clin. North Am. 17: 989-1005.
6. Berry, N.B., et al. 2004. Transcriptional targeting in ovarian cancer cells using the human epididymis protein 4 promoter. Gynecol. Oncol. 92: 896-904.
7. LocusLink Report (LocusID: 10406). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

HE4 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HE4 of rat 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-27577 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.

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.

APPLICATIONS

HE4 (T-20) is recommended for detection of precursor and mature HE4 of rat 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).

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) 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.