

TAG-72 (0.N.561): sc-59710

BACKGROUND

Tumor-associated glycoprotein 72 (TAG-72) is a high molecular weight glycoprotein that localizes to the cytoplasm and cell membrane of malignant cells. TAG-72 is expressed by 80% of colorectal carcinomas but is rarely expressed in normal epithelium and benign diseases. In addition, TAG-72 is highly expressed by low-grade mucoepidermoid carcinomas but is absent in pure squamous cell mucoepidermoid carcinomas. With the exception of secretory endometrium, TAG-72 expression is weak or nondetectable in normal adult tissues. TAG-72 is expressed by several gynecologic malignancies including common epithelial ovarian carcinomas and endometrial carcinomas. In human prostatic adenocarcinomas, TAG-72 expression negatively correlates with the Gleason grade of differentiation. TAG-72 is expressed by the majority of gastric, esophageal, pancreatic and non-small cell lung carcinomas. Finally, TAG-72 is useful for purifying primary ovarian cancer cells from patient ascites.

REFERENCES

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2. Simpson, J. and Schlom, J. 1988. The use of monoclonal antibody B72.3 in the management of gynecologic malignancies. *Yale J. Biol. Med.* 61: 351-366.
3. Roa, R.A., Hruban, R.H., McKenzie, P. and Richtsmeier, W. 1994. Tumor-associated glycoprotein expression in salivary gland mucoepidermoid carcinomas: an immunohistochemical study using the monoclonal antibody B72.3. *Laryngoscope* 104: 304-308.
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5. Karan, D., Johansson, S.L., Lin, M.F. and Batra, S.K. 2001. Expression of tumor-associated glycoprotein-72 (TAG-72) antigen in human prostatic adenocarcinomas. *Oncol. Rep.* 8: 1123-1126.
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SOURCE

TAG-72 (0.N.561) is a mouse monoclonal antibody raised against membrane enriched fraction of a breast carcinoma liver metastasis 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

TAG-72 (0.N.561) is recommended for detection of TAG-72 of mouse, rat, human and bovine origin by 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of TAG-72: 220-400 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) 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. 3) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

SELECT PRODUCT CITATIONS

1. Karnati, S. and Baumgart-Vogt, E. 2008. Peroxisomes in mouse and human lung: their involvement in pulmonary lipid metabolism. *Histochem. Cell Biol.* 130: 719-740.

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 web site at www.scbt.com for detailed protocols and support products.



See **TAG-72 (CC49): sc-20043** for TAG-72 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.