# TAG-72 (6A190): sc-73106



The Power to Question

## **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**

- Thor, A., Ohuchi, N., Szpak, C.A., Johnston, W.W. and Schlom, J. 1986. Distribution of oncofetal antigen tumor-associated glycoprotein-72 defined by monoclonal antibody B72.3. Cancer Res. 46: 3118-3124.
- 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. Tumorassociated glycoprotein expression in salivary gland mucoepidermoid carcinomas: an immunohistochemical study using the monoclonal antibody B72.3. Laryngoscope 104: 304-308.
- Guadagni, F., Roselli, M., Cosimelli, M., Ferroni, P., Spila, A., Cavaliere, F., Arcuri, R., Carlini, S., Mariotti, S., Gandolfo, G.M., Casciani, C.U., Greiner, J.W. and Schlom, J. 1996. TAG-72 expression and its role in the biological evaluation of human colorectal cancer. Anticancer Res. 16: 2141-2148.
- 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.
- Barker, S.D., Casado, E., Gomez-Navarro, J., Xiang, J., Arafat, W., Mahasreshti, P., Pustilnik, T.B., Hemminki, A., Siegal, G.P., Alvarez, R.D. and Curiel, D.T. 2001. An immunomagnetic-based method for the purification of ovarian cancer cells from patient-derived ascites. Gynecol. Oncol. 82: 57-63.

## **SOURCE**

TAG-72 (6A190) is a mouse monoclonal antibody raised against a membraneenriched fraction of a human breast carcinoma liver metastasis.

#### **PRODUCT**

Each vial contains 200  $\mu g \ lgG_1$  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 (6A190) is recommended for detection of TAG-72 of broad species origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu g$  per 100-500  $\mu g$  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  $\mu g$  per 1 x 106 cells).

Molecular Weight of TAG-72: 220 kDa.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker^M 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). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

#### **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, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.

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