TAG-72 (B72.3): sc-20042

**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 mucopidermoid carcinomas but is absent in pure squamous cell mucopidermoid 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**


**SOURCE**

TAG-72 (B72.3) is a mouse monoclonal antibody raised against a membrane-enriched fraction of a human breast carcinoma liver metastasis.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TAG-72 (B72.3) is available conjugated to agarose (sc-20042 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-20042 HRP), 200 µg/ml, for WB; to either phycoerythrin (sc-20042 PE), fluorescein (sc-20042 FITC), Alexa Fluor® 488 (sc-20042 AF488), Alexa Fluor® 546 (sc-20042 AF546), Alexa Fluor® 594 (sc-20042 AF594) or Alexa Fluor® 647 (sc-20042 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-20042 AF680) or Alexa Fluor® 790 (sc-20042 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

TAG-72 (B72.3) 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 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 kDa.

**RECOMMENDED SUPPORT REAGENTS**

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

1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGk BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

TAG-72 (B72.3) sc-20042. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon adenocarcinoma tissue showing cytoplasmic and membrane staining of tumor cells.

TAG-72 (B72.3) PE: sc-20042 PE. FCM analysis of Jurkat cells. Black line histogram represents the isotype control, normal mouse IgGk-PE: sc-2986.

**SELECT PRODUCT CITATIONS**


**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.