Anti-Human CD227 (Mucin 1) Purified

Catalog Number: 14-9893
Also known as: Mucin Glycoprotein, MUC1, EMA (Epithelial Membrane Antigen), Episialin, Tumor-Associated Mucin, PEM (Polymorphic Epithelial Mucin), Breast Cancer-Associated Antigen
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD227 (Mucin 1) Purified
REF **Catalog Number:** 14-9893
Clone: SM3
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium azide

Description

This SM3 monoclonal antibody reacts with the under-glycosylated form of human Mucin 1 (MUC1, CD227), a large glycoprotein belonging to the mucin protein family. Mucin 1 contains a polypeptide core consisting of multiple tandem repeats that become highly glycosylated. Mucin 1 is typically expressed in ductal or glandular epithelial cells and is localized to the apical membrane. In cancerous cells, Mucin 1 expression is increased and membrane-specific localization is lost resulting in expression throughout the membrane and cytoplasm. High levels of under-glycosylated Mucin 1 are thought to affect cell behavior during both invasion and metastasis as well as in immune recognition. In addition, under-glycosylated Mucin 1 is shed from the epithelial cell surface and can be detected in circulation. Alterations in Mucin 1 glycosylation are found in most adenocarcinomas of the breast, lung, pancreas, prostate, and ovary. Mucin 1 has recently been shown to co-localize and interact with members of the erbB receptor kinase family, proteins that are upregulated in more aggressive forms of breast cancer.
Please note this antibody sees a distinct epitope from other Mucin 1 antibodies.

Applications Reported

This SM3 antibody has been reported for use in western blotting, immunohistochemical staining, and immunocytochemistry.

Applications Tested

This SM3 antibody has been tested by western blot and immunocytochemistry on MCF7 cell line as well as by immunohistochemistry on FFPE (formalin-fixed paraffin embedded) tissue. This can be used at less than or equal to 5 µg/ml. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Burchell J, Taylor-Papadimitriou J, Boshell M, Gendler S, Duhig T. A short sequence, within the amino acid tandem repeat of a cancer-associated mucin, contains immunodominant epitopes. Int J Cancer. 1989 Oct 15;44(4):691-6.

Related Products
14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)

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