

Thomsen-Friedenreich Antigen / CD176 (Pan Carcinoma Marker) Antibody

Mouse Monoclonal Antibody [Clone SPM320]

Catalog No	Format	Size
MSM1X-936-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
MSM1X-936-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
MSM1X-936-P1BX	Purified Ab WITHOUT BSA at 1.0mg/ml	100 ug

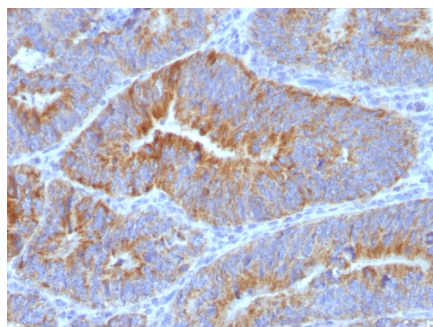
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	SPM320
Gene Name	N/A
Immunogen	Neuraminidase-treated human red blood cells
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgM / Kappa
Mol. Weight of Antigen	Multiple
Cellular Localization	N/A
Species Reactivity	Human, Mouse, Rat
Positive Control	KG1 cells. Colon Carcinoma.

**Optimal dilution for a specific application should be determined.*

Product Images for Thomsen-Friedenreich Antigen / CD176 (Pan Carcinoma Marker) Antibody



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Thomsen-Friedenreich Monoclonal Antibody (SPM320) at 4ug/ml. Antigen retrieval in 10mM Citrate buffer, pH 6.0; ABC detection system with DAB Chromogen. Note Cell Surface staining of epithelial cells.

Specificity & Comments

Recognizes a disaccharide epitope, Gal 1-3GalNAc, of Thomsen-Friedenreich (TF) antigen. It is specific for both anomeric forms of the disaccharide (TF and TF_α), including related structures on the glycolipid and shows no cross-reactivity with sialylated glycoprotein. The Thomsen-Friedenreich antigen acts as an oncofetal antigen, with low expression in normal adult tissues but increasing to fetal levels of expression in hyperplasia or malignancy. It is considered as a pan-carcinoma marker. This MAb is capable to agglutinate desialylated red blood cells. During metastasis, the ability of malignant cells to form multicellular aggregates via homotypic or heterotypic aggregation and their adhesion to the endothelium are critical. The tumor-associated carbohydrate Thomsen-Friedenreich antigen (Gal-GalNAc) is involved in tumor cell adhesion and tissue invasion. It also causes an immune response, and overexpression of the antigen causes cancer cells to be more sensitive to natural killer cell lysis. The Thomsen-Friedenreich antigen is suppressed in normal healthy cells and represents one of the few chemically well-defined antigens associated with tumor malignancy. The presence of the Thomsen-Friedenreich antigen on the surface of cancer cells may result from a divergence from the normal pathway for O-linked glycosylation in these cells, most likely caused by inappropriate localization of the enzymes involved in synthesis of the disaccharide.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
