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Thomsen-Friedenreich Antigen / CD176 (Pan Carcinoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone A68-B/A11]
Catalog # AH12992

Product Information

Application	IHC, IF
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	A68-B/A11
Calculated MW	Multiple

Additional Information

Application Note	IHC~~1:100~500 IF~~1:50~200
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Thomsen-Friedenreich Antigen / CD176 (Pan Carcinoma Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Recognizes a disaccharide epitope, Gal1-3GalNAc, of Thomsen-Friedenreich (TF) antigen. It is specific for both anomeric forms of the disaccharide (TF and TF, including related structures on the glycolipid) and shows no cross-reactivity with sialylated glycophorin. 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.

References

Karsten U. 2002. CD176 Workshop panel report. In: Mason D, Simmons D, Buckley C, Schwartz-Albiez R, Hadam M, Saalmuller A, Clark E, Malavasi F, Morrissey JA, Vivier E, et al., editors. Leucocyte Typing VII.