

# Product Datasheet

## Thomsen-Friedenreich Antigen Antibody (SPM320) NBP2-45282-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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**NBP2-45282-0.1mg**

Thomsen-Friedenreich Antigen Antibody (SPM320)

Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	SPM320
Preservative	0.05% Sodium Azide
Isotype	IgM Kappa
Purity	Protein L or PEG purified
Buffer	10 mM PBS with 0.05% BSA
Product Description	
Description	<p>200ug/ml of antibody purified from Bioreactor Concentrate. Prepared in 10 mM PBS with 0.05% BSA &amp; 0.05% azide. Also available WITHOUT BSA &amp; azide at 1.0 mg/ml. (NBP3-11524)</p> <p>Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.</p>
Host	Mouse
Species	Human, Mouse, Rat
Marker	Pan Carcinoma Marker
Specificity/Sensitivity	<p>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 , 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 monoclonal antibody 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.</p>
Immunogen	Neuraminidase-treated human red blood cells
Product Application Details	
Applications	Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunofluorescence
Recommended Dilutions	Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml, Immunofluorescence 0.5 - 1.0 ug/ml

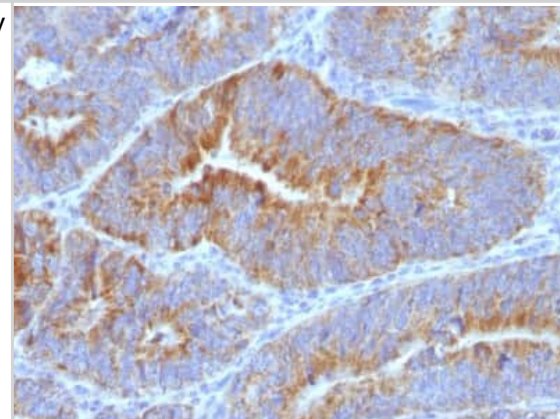


**Application Notes**

Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. Use in Flow Cytometry reported in scientific literature (PMID: 30344930).

**Images**

Immunohistochemistry-Paraffin: Thomsen-Friedenreich Antigen Antibody (SPM320) [NBP2-45282] - Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Thomsen-Friedenreich Antigen 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 epithel

**Publications**

Cuello HA, Segatori VI, Alberto M et al. Aberrant O-glycosylation modulates aggressiveness in neuroblastoma. Oncotarget. 2018-09-25 [PMID: 30344930] (FLOW, Human)





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### **Products Related to NBP2-45282-0.1mg**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96975-0.5mg	Mouse IgM Kappa Light Chain Isotype Control (MMK)

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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