

Anti-Thomsen-nouveaupolysaccharide A1 [KT-IgM-8] Bulk Size Ab02511-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgM format, created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: KT-IgM-8

Alternative Name(s) of Target: Tn-PS A1; Thomsen-nouveau (Tn); Tn antigen; Tn saccharide; N-acetyl Galactosamine; Alpha-GalNAc; Alpha GalpNAc; GalNAc; GalNAc-alpha; N-acetyl-alpha-D-galactosamine; Blood group A antigen

UniProt Accession Number of Target Protein:

Published Application(s): Complement-dependent cytotoxicity, glycan array technologies, in vitro, in vivo, ELISA, FC

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing C57BL/6 mice against Tn-PS A1.

Specificity: The antibody is specific for Tn-PS A1. It does not cross react with PS A1.

Application Notes: The specificity of the original format of the antibody was confirmed by ELISA analysis. The ability of the antibody to bind cancer cells expressing the Tn antigen on the cell surface (MCF-7 and HCT-116) was evaluated by by FC. The antibody demonstrated the ability to bind both MCF-7 and HCT-116 tumor cells at 30 µg/mL with a shift in fluorescence of 49% in both cell lines. The antibody demonstrated in vitro tumor killing using an LDH assay. The assay measured that the antibody-induced complement-dependent cytotoxicity was 30%. In vivo passive immunotherapy approach using an MCF-7 cell line-derived xenograft model was evaluated. The antibody demonstrated approximately 40% reduction in tumor growth in the MCF-7 model (Trabbic et al., 2018; PMID: 30030557).

Antibody First Published in: Trabbic et al. Production of a mouse monoclonal IgM antibody that targets the carbohydrate Thomsen-nouveau cancer antigen resulting in in vivo and in vitro tumor killing Cancer Immunol Immunother. 2018 Sep;67(9):1437-1447. [PMID:30030557](#)

Note on publication: The original paper describes the generation and characterization of the antibody.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.