

Anti-Trimeric Lewis X [54-5C10-A] Standard Size Ab00755-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG3 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: 54-5C10-A

Alternative Name(s) of Target: LeX; Lewis X; LewisX; trimeric LeX; Galbeta1-4(Fucalpha1-3)GlcNAcbeta; Lewis X trisaccharide

UniProt Accession Number of Target Protein: O02197

Published Application(s): crystallization, SPR, ELISA, IF

Published Species Reactivity: Schistosoma mansoni

Immunogen: 54-5C10-A mAb was prepared from generating a hybridoma cell line derived from lymphocytes from mice with a schistosomal infection. The mAb was selected for by screening for interaction with the Lewis X epitope by SPR.

Specificity: 54-5C10-A Fab requires at least three repeating units of the Lewis X trisaccharide to bind to CCA (circulating cathodic antigen - an antigen released from the gut of the adult worm which contains different oligomeric presentations of Lewis X). CCA is thought to have an important role in modulating the host's immune response. Lewis X is also found one of the carbohydrate blood group antigens and plays a role in cell adhesion by both carbohydrate-carbohydrate and carbohydrate-protein interactions.

Application Notes: 54-5C10-A can be used in IF assays and can be crystallised as a Fab fragment. The antibody can also be used for SPR and in ELISA (allows diagnosis schistosomiasis in humans).

Antibody First Published in: de Geus et al. Characterization of a diagnostic Fab fragment binding trimeric Lewis X. Proteins. 2009 Aug 1;76(2):439-47. [PMID:19173313](#)

Note on publication: Describes the generation of 54-5C10-A and its characterization, including its binding affinity and specificity by SPR, IF assays, structure determination of the Fab by Xray crystallography and its mode of binding to Lewis X via docking.

Product Form

Size: 200 µg Purified antibody.

Purification:

Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. 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.