

Anti-LeX [291-2G3-A] Standard Size Ab00495-10.0

This chimeric human 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: Human IgG1, Kappa

Clone Number: 291-2G3-A

Alternative Name(s) of Target: Sialyl Lewis X; SLeX; Stage-specific embryonic antigen 1; SSEA-1; CD15

UniProt Accession Number of Target Protein:

Published Application(s): ICC, IHC

Published Species Reactivity: n/a

Immunogen: This antibody was obtained from mice infected with schistosomes.

Specificity: The antibody binds to Lewis X trisaccharide, a carbohydrate pivotal in mediating specific cell-cell interactions, with an affinity of 11 µM.

Application Notes: The antibody binds specifically to Lewis X, a tetrasaccharide carbohydrate blood-group antigen involved in cell-to-cell adhesion. The antigen is involved in human fertilisation, as it is present on the terminus of N- and O-glycans of the zona pellucida of egg cells, which are recognised by sperm cells. This interaction allows fusion and fertilisation to occur. LeX also plays a role in leukocyte tethering as they travel through the bloodstream as it can interact with L-selectin, P-selectin and E-selectin. LeX is also present on neutrophils, mediating phagocytosis and chemotaxis, and is expressed in patients with Hodgkin disease, B-cell chronic lymphocytic leukemia, acute lymphoblastic leukemias and acute nonlymphocytic leukemia. It is also expressed as SSEA-1 on mouse embryonic stem cells. LeX also plays a role in human resistance to the parasitic disease schistosomiasis.

Antibody First Published in: van Roon AM, Pannu NS, Hokke CH, Deelder AM, Abrahams JP.

Crystallization and preliminary X-ray analysis of an anti-Lewis X Fab fragment with and without its Lewis X antigen. Acta Crystallogr D Biol Crystallogr. 2003 Jul;59(Pt 7):1306-9. Epub 2003 Jun 27. PMID:12832795

Note on publication: Describes the production of the Fab fragment of the monoclonal antibody 291-2G3-A, used to crystallise the structure of Lewis X.

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.