

## Anti-LeX [291-2G3-A] Standard Size Ab00495-1.1

This reformatted mouse 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:** Mouse 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.