

Anti-Blood Group Antigen-Related Glycan Antibodies

Anti-Sialyl Lewis A, Lewis X, Sialyl Lewis X, Lewis Y Monoclonal Antibody

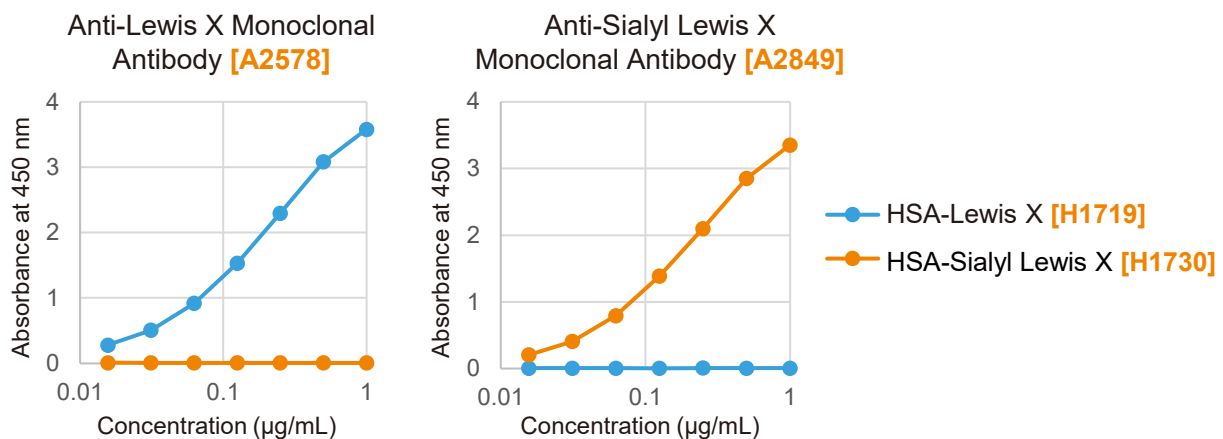
One of the most well-known blood group systems, the ABO system, is classified based on expression differences in glycan antigens, namely H-type, A-type, and B-type. In addition to this, several other blood group systems based on glycan antigens are also known, such as the Lewis system - comprising Lewis A [Le^a] and Lewis B [Le^b].¹ Other structurally related glycans include sialyl Lewis a (sLe^a), Lewis x (Le^x), sialyl Lewis x (sLe^x), and Lewis y (Le^y).^{2,3}

Of these, Le^x (SSEA-1) is also known to be a marker of undifferentiated mouse embryonic stem cells,⁴ and sLe^x functions as a ligand for E-selectin, which is involved in the adhesion of neutrophils to sites of inflammation.⁵⁻⁷ These glycans are often overexpressed in cancer cells and have been found to contribute to cancer progression.^{3,8} In particular, sLe^a (also known as CA19-9) is widely used as a tumor biomarker.

We offer a wide range of products related to these glycans, including synthetic versions, conjugates, as well as the following antibodies.

Product Name	Isotype	Size	Product No.
Anti-Sialyl Lewis A Monoclonal Antibody (1H4)	Mouse IgG3	0.1mg/vial	[A2584]
Anti-Sialyl Lewis A Monoclonal Antibody (2D3)	Mouse IgM	0.1mg/vial	[A2509]
Anti-Lewis X Monoclonal Antibody	Mouse IgM	0.1mg/vial	[A2578]
Anti-Sialyl Lewis X Monoclonal Antibody	Mouse IgM	0.1mg/vial	[A2849]
Anti-Lewis Y Monoclonal Antibody	Mouse IgG3	0.1mg/vial	[A2510]

Binding Specificity of **A2578** and **A2849**





ELISA plates were coated with HSA-Lewis X (Product No. **H1719**) or HSA-Sialyl Lewis X (Product No. **H1730**). Anti-Lewis X Antibody (Product No. **A2578**) or Anti-Sialyl Lewis X Antibody (Product No. **A2849**) were then added and allowed to incubate.

Primary antibodies were detected using appropriate secondary antibodies.

A2578 shows high specificity for Lewis X, while **A2849** shows high specificity for Sialyl Lewis X.

Anti-Blood Group Antigen-Related Glycan Antibodies

Glycan Structure	Product		
	Glycan 	Conjugate 	Antibody 
Sialyl Lewis A	Please contact us.	Please contact us.	[A2584] [A2509]
Lewis X / SSEA-1	SSEA-1-PrNH₂ Please contact us. [S0946]	HSA-Lewis X 0.1mg/vial [H1719] Lewis X -Magnet Beads 1vial [L0381]	[A2578]
Sialyl Lewis X	Sialyl Lewis X-Lactose [I1317] Sialyl Lewis X-Lactose Ethylazide [S0922] Sialyl Lewis X-Lactose Ethylamine [S0923] Please contact us.	HSA-Sialyl Lewis X 0.1mg/vial [H1730]	[A2849]
Lewis Y	Please contact us.	Please contact us.	[A2510]
A Antigen	A Antigen PEG-trifluoroacetamide [A2631] Please contact us.	Please contact us.	
B Antigen	B Antigen PEG-trifluoroacetamide [B4172] Please contact us.	Please contact us.	
H Antigen	Fuca(1-2)Galβ(1-3)GlcNAc-β-pNP (= H type 1 β-pNP Glycoside) [F0894] Fuca(1-2)Galβ(1-3)GalNAc-α-pNP (= H type 3 α-pNP Glycoside) [F0895] Fuca(1-2)Galβ(1-3)GalNAc-β-pNP (= H type 3 β-pNP Glycoside) [F0896] Fuca(1-2)Galβ(1-3)GalNAc-α-propylamine [F1189] Please contact us.	Please contact us.	

- References**
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 - 4) H. C. Gooi *et al.*, *Nature* **1981**, 292, 156. <https://doi.org/10.1038/292156a0>
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 - 7) G. Walz *et al.*, *Science* **1990**, 250, 1132. <https://doi.org/10.1126/science.1701275>
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