α-Gal Epitope (Galα1-3Galβ1-4GlcNAc-R) monoclonal antibody (M86)

Widely described antibody against α-galactose residues with broad cross-reactivity among different species. Useful for measuring the α-Gal epitope expression on cells, glycolipids and glycoproteins, characterization of hyperacute rejection (HAR) in organ and tissue transplantations and monitoring xenotransplantation experiments. The IgM isotype mimicks *in vivo* reactions and can be used for cytotoxicity assays for α-Gal specific pathways (addition or presence of complement necessary). Ideal as a high-throughput screening tool for inhibitors of antibody induced cytotoxicity. Organ transplantation from pig to human result in HAR. Humans naturally produce large quantities of anti-α-Gal antibodies, which represent 1-3% of all circulating immunoglobulins and are produced by about 1% of all B cells. When pig organs or tissues are transplanted into the human body, the IgM isotype of anti-Gal binds to α-Gal epitopes, which causes activation of the complement cascade, resulting in cell lysis. This rapid activation of complement by anti-Gal IgM is an immunological barrier that poses the greatest risk of initiating HAR. The monoclonal antibody M86 to Galα1-3Gal epitopes developed by U. Galili, *et al.* is an essential tool in the study of human xenotransplantation and related research.

This antibody is covered by our Worry-Free Guarantee.

Citations: 68 View Online »

Ordering Information Order Online »

ALX-801-090-1	1Vial

Manuals, SDS & CofA View Online »

Handling & Storage

Use/Stability	Stable for at least 3 years when stored at -20°C.
Handling	Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -20°C.
Long Term Storage	-20°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	α-Galactose 1,3
Application	ELISA, Flow Cytometry, FUNC, IHC (PS), WB
Application Notes	Functional Application: can be used for cytotoxicity assays for α-Gal specific pathways
Clone	M86
Crossreactivity	Does not cross-react with β-Gal glycoproteins or BSA.
Formulation	Liquid. Tissue culture supernatant.
Host	Mouse
Immunogen	Rabbit red blood cell membrane.
Isotype	IgM
Recommendation Dilutions/Conditions	Note: Do not use non-fat milk for blocking! Many blocking agents from non-human mammal sources will cross-react with the antibody.Appropriate antibody dilution may vary from lot to lot. An initial dilution of 1:5 is recommended.Suggested dilutions/conditions may not be available for all applications. Optimal conditions must be determined individually for each application.
Source	Hybridoma tissue culture.
Species Reactivity	Mouse, Porcine, Rat

Specificity	Recognizes synthetic and naturally produced mouse, rat and pig Galα1-3Gal epitopes on glycoproteins and glycolipids.
Technical Info / Product Notes	**Cited samples:** *For an overview on cited samples please click here.*
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.