

PRODUCT INFORMATION



Ganglioside G_{M1} Asialo Polyclonal Antibody

Item No. 28638

Overview and Properties

Contents:	This vial contains 100 µl of polyclonal antibody to asialo G _{M1}
Immunogen:	Purified ganglioside G _{M1} asialo and complete Freund's adjuvant
Form:	This vial contains 100 µl of polyclonal antibody to ganglioside G _{M1} asialo.
Storage:	-20°C (as supplied)
Stability:	≥4 years
Host:	Rabbit
Isotype:	IgG/IgM
Applications:	ELISA and TLC immunoblotting; The optimal working concentration/dilution should be determined empirically.

Description

Ganglioside G_{M1} asialo (Item No. 15586) is a component of cellular lipid rafts and can be formed by the cleavage of the sialic acid residue from ganglioside G_{M1} (Item No. 19579) by neuraminidase.^{1,2} Ganglioside G_{M1} asialo is a glycolipid receptor for *P. aeruginosa* flagellin and stimulates defensive responses in host cells, including extracellular ATP release, calcium mobilization, and ERK1/2 phosphorylation when stimulated by flagellin and an anti-ganglioside G_{M1} asialo antibody.³ The percentage of ganglioside G_{M1} asialo-positive natural killer (NK) and CD8⁺ T cells in the lung is increased in a mouse model of respiratory syncytial virus (RSV) infection compared with healthy animals.¹ Depletion of ganglioside G_{M1} asialo-positive NK and T cells reduces IFN-γ levels in the lung, reduces weight loss, and increases lung viral load in RSV-infected mice. Ganglioside G_{M1} Asialo Polyclonal Antibody can be used for ELISA and TLC immunoblotting.

References

1. Moore, M.L., Chi, M.H., Goleniewska, K., *et al.* Differential regulation of GM1 and asialo-GM1 expression by T cells and natural killer (NK) cells in respiratory syncytial virus infection. *Viral Immunol.* **21(3)**, 327-339 (2008).
2. Sabesan, S. and Lemieux, R.U. Synthesis of tri- and tetrasaccharide haptens related to the Asialo forms of the gangliosides G_{M2} and G_{M1}. *Can. J. Chem.* **62(4)**, 644-654 (1984).
3. McNamara, N., Khong, A., McKemy, D., *et al.* ATP transduces signals from ASGM1, a glycolipid that functions as a bacterial receptor. *Proc. Natl. Acad. Sci. U.S.A.* **98(16)**, 9086-9091 (2001).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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