Synaptic Systems

Rudolf-Wissell-Str. 28
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

MDGA 1

Cat.No. 421 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H_2O, then aliquot and store at -20°C until use.
Applications	**WB**: not tested yet **IP**: not tested yet **ICC**: not tested yet **IHC**: 1 : 500 **IHC-P/FFPE**: not tested yet
Immunogen	Recombinant protein corresponding to AA 19 to 917 from mouse MDGA1 (UniProt Id: Q0PMG2)
Reactivity	Reacts with: mouse (Q0PMG2). Other species not tested yet.
Specificity	Specific for MDGA 1. (K.O. verified)

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

MAM **d**omain **G**PI **a**nchor **1** and 2 proteins (**MDGA1** and MDGA2) are Ig superfamily adhesion molecules composed of six IG domains, a fibronectin III domain, a MAM domain, and a GPI anchor.

MDGAs are required for radial migration and positioning of cortical neurons making it a useful layer and area specific marker during neural development.

They play a role in the formation or maintenance of Neuroligin2 positive inhibitory synapses.

Selected General References

MDGAs interact selectively with neuroligin-2 but not other neuroligins to regulate inhibitory synapse development.
Lee K, Kim Y, Lee SJ, Qiang Y, Lee D, Lee HW, Kim H, Je HS, Südhof TC, Ko J
Proceedings of the National Academy of Sciences of the United States of America (2013) 110(1): 336-41.

IgSF molecule MDGA1 is involved in radial migration and positioning of a subset of cortical upper-layer neurons.
Ishikawa T, Gotoh N, Murayama C, Abe T, Iwashita M, Matsuzaki F, Suzuki T, Yamamoto T
Developmental dynamics : an official publication of the American Association of Anatomists (2011) 240(1): 96-107.

Radial migration of superficial layer cortical neurons controlled by novel Ig cell adhesion molecule MDGA1.
Takeuchi A, O'Leary DD
The Journal of neuroscience : the official journal of the Society for Neuroscience (2006) 26(17): 4460-4.

MDGA1, an IgSF molecule containing a MAM domain, heterophilically associates with axon- and muscle-associated binding partners through distinct structural domains.
Fujimura Y, Iwashita M, Matsuzaki F, Yamamoto T
Brain research (2006) 1101(1): 12-9.