



Qty: 100 µg/400 µl

Rabbit anti-Velis-3
(MALS-3)

Catalog No. 51-5600

Lot No. See product label

Rabbit anti-Velis-3 (MALS-3)

FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/ml in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. The antibody is affinity-purified against recombinant protein from rabbit antiserum.

POLYCLONAL ANTIBODY DESIGNATION (PAD): ZMAL3

ISOTYPE: Rabbit IgG

IMMUNOGEN

Synthetic peptide derived from the C-terminus of the rat Velis-3 (MALS-3) protein.

SPECIFICITY

This antibody is specific for the 22 kDa Velis -3 protein. Cross reactivity with recombinant Velis-1 or Velis-2 proteins or with other related endogenous proteins has not been observed. Reactivity of this antibody with Velis-2 was confirmed on Western blots using lysates from rat brain and lysates from COS cells transfected with the Velis-2 cDNA.

REACTIVITY

This antibody is confirmed reactive with rat Velis-3. The reactivity of this antibody with other species has not been determined.

Sample	ELISA	Immuno-histochemistry (frozen sections)	Immuno-precipitation	Western blotting
Rat		+	+	+
Immunogen	+			

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1.0 µg/ml
Immunohistochemistry: 1 µg/ml
Immunoprecipitation: 1 µg/IP reaction
Western Blotting: 1 µg/ml

The suitability of this antibody for applications other than those mentioned here has not been evaluated.

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI515600

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BACKGROUND

Protein assembly at the post synaptic density (PSD) of neuronal synapses is mediated in part by protein interactions with PDZ (PSD-95/discs large/zona occludens-1) motifs. The Mammalian LIN-7 (MALS) proteins⁽¹⁾ are a family of small synaptic proteins that are the mammalian homologs of LIN-7, a *C. elegans* protein essential for vulval development. MALS proteins are also known as Veli (Vertebrate Lin-7) proteins.⁽²⁾ MALS-3 mRNA is most abundant in kidney, followed by brain, liver, thymus and heart. MALS-3 is undetectable in spleen. In cultured cortical neurons, MALS proteins are clustered together with PSD-95 and NMDA-type glutamate receptors. MALS proteins are suggested to have roles in regulating the recruitment of neurotransmitter receptors to the PSD⁽¹⁾ and in the assembly of proteins involved in synaptic vesicle exocytosis and synaptic junctions.⁽²⁾

REFERENCES

1. Jo K, Derin R, Li M, Bret D. Characterization of MALS/Velis-1, -2, and -3: a family of mammalian LIN-7 homologs enriched at brain synapses in association with the postsynaptic density-95/NMDA receptor postsynaptic complex. *J. Neurosci.*, June 1; 19(11):4189-4199 (1999).
2. Butz S, Okamoto M, Sudhof TC. A tripartite protein complex with the potential to couple synaptic vesicle exocytosis to cell adhesion in brain. *Cell*, Sept. 18;94(6):773-782 (1998).

RELATED PRODUCTS

Product	Clone/PAD*	Cat. No.	
Rb x Velis-1	ZMAL1	51-5000	
Rb x Velis-2	ZMAL2	51-5400	
Rb x PSD-93	PDZ93	51-6600	
Rb x PSD-95	PDZ95	51-6900	
Rb x SAP97	PDZ97	51-7000	
Rb x SAP102	PDZ102	51-7100	
Rb x nNOS	Z-RNN3	61-7000	<--AWESOME nNOS
Rb x NMDA NR1 splice variant N1 (Ab2)	DBVN1	51-5800	
Rb x NMDA NR1 splice variant C1 (Ab2)	DBVC1	51-7200	
Rb x NMDA NR1 splice variant C2 (Ab2)	DBVC2	51-5900	
Rb x NMDA NR1 splice variant C2' (Ab2)	DBVC2P	51-6000	
Rb x NMDA-Receptor 1	2NR2	51-3600	
Ms x NMDA-Receptor 1A + 1D	5C4	32-0800	
Ms x NMDA-Receptor 2A	A3-2D10	32-0600	
Ms x NMDA-Receptor 2B	B3-13B11	32-0700	
Rb x NMDA Receptor 2B	2K11	71-8600	
Ms x GluR1, 2 and 3	2D8	32-0100	
Ms x GluR2 and 4	3A11	32-0200	
Ms x GluR3	3B3	32-0400	
Rb x mGluR4	ZTS4	51-3100	
Ms x Glutamate Transporter EAAC1	35-A9	32-1000	
Ms x α -CaM Kinase II	CB α -2	13-7300	
Ms x β -CaM Kinase II	CB β -1	13-9800	
Rb x Glycine Receptor	--	51-5300	
Ms x Nitrotyrosine	HM11	32-1900	
Rb x Synapsin-1	--	51-5200	
Rb x Synaptophysin	Z66	18-0130	
Ms x Tyrosine Hydroxylase	1hy1	32-2100	
Ms x Ubiquitin	Ubi-1	13-1600	

*Polyclonal Antibody Designation

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Unconjugated	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

Zymed® and ZyMAX™ are trademarks of Zymed Laboratories Inc. Cy™ is a trademark of Amersham Life Sciences, Inc. Sepharose® is a registered trademark of Pharmacia LKB.

For Research Use Only

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI515600

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.