

Anti-MAGE-G1 / Necdin-like 2 antibody, rabbit serum (MG1)

Product code	74-114
Size	100 µl
Storage	Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.05% sodium azide
Purity	Rabbit antiserum
Immunogen	Purified recombinant MBT-fused mouse MAGE-G1 (aa 1-279)
Isotype	Rabbit IgG
Reactivity	Mouse, rat and human MAGE-G1.
Special notes	N/A
Application	<ol style="list-style-type: none"> 1. Western blotting (1/1,000-1/300) 2. Immunoprecipitation. 3. Immunoaffinity purification 4. ELISA Other applicacatiotons have not been tested.
Background	<p>MAGE-G1 (melanoma-associated antigen G1, also designated necdin-like 2) gene encodes a necdin homologous protein. MAGE-G1 gene, similarly to necdin gene, has been mapped to the region of proximal chromosome 15q in human, which is subject to genomic imprinting and implicated in various human neurological and mental disorders (ref.1). From this finding it is suggested that MAGE-G1 is involved in brain development, and its abnormality causes neurodevelopmental diseases, although its biochemical and functional features remain largely unknown. MAGE-G1 has characteristics similar to those of necdin, which suppresses cell growth by inducing cell cycle arrest. MAGE-G1, like necdin, targets both the transcription factor E2F1 and p75 neutrophin receptor (p75NTR) to regulate cell viability during brain development (ref.2). An antibody (named MG1) against mouse MAGE-G1 was raised in rabbit (ref.2).</p>
Data Link	UniProtKB Q9CPR8 (mouse), Q96MG7 (human)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 74-114 Anti-MAGE-G1 / Nectin-like 2 antibody, rabbit serum (MG1)

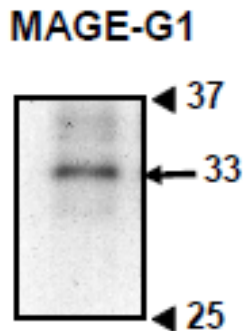


Fig.1 Western blotting of crude extract of mouse embryonic cells with anti-MAGE-G1 antibody (MG1).

Sample (10 µg protein) was prepared from mouse embryonic fibroblast E 14.5.

The antibody was used at 1/300 dilution.

Numbers on the right are positions of molecular mass in kDa.



Fig.2 Western blot analysis of MAGE-G1 at different stages of neural differentiation with this antibody .

MAGE-G1 (G1) was analyzed by Western blotting in whole lysates of mouse P19 embryonal carcinoma cells at different stages of neural differentiation. UN, undifferentiated P19 cells; RA, aggregated cells treated with retinoic acid; PN, enriched postmitotic neurons.

The result revealed that P19 cells express MAGE-G1 (32 kDa) during the course of neuronal differentiation. The level of MAGE-G1 was the highest in retinoic acid-treated P19 cells.

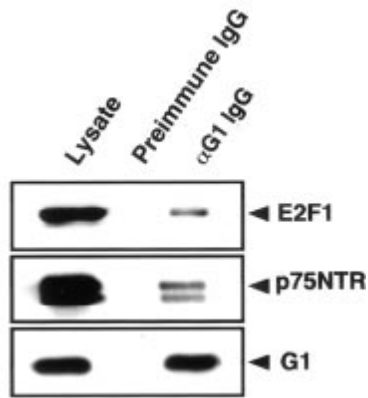


Fig.3 Immunoaffinity purification of the protein complex with anti-MAGE-G1 antibody.

Detection of endogenous complexes of MAGE-G1 with E2F1 and p75NTR proteins. The lysate from retinoic acid-treated P19 cells was applied to immunoaffinity columns of anti-MAGE-G1 IgG (αG1 IgG) and preimmune IgG (Preimmune IgG). Bound proteins were immunoblotted for E2F1, p75NTR, and MAGE-G1 (G1) with respective antibodies. MAGE-G1 endogenously forms stable complexes with E2F1 and p75NTR in differentiated P19 cells.

References: This antibody was produced and used in the following publication.

1. Kuwako K *et al.* (2004) "Necdin-related MAGE proteins differentially interact with the E2F1 transcription factor and the p75 neutrophin receptor." *J Biol Chem* 279: 1703-1712 PMID: [14593116](https://pubmed.ncbi.nlm.nih.gov/14593116/)

Related products

74-100 Anti-Necdin antibody, rabbit polyclonal

74-112 Anti-MAGE-D1 / Dlxin-1 / NRAGE antibody, rabbit serum(MD1)