Over-expression of MAGED4B increases cell migration and growth in oral squamous cell carcinoma and is associated with poor disease outcome

Chan Eng Chong, Kuei Peng Lim, Chai Phei Gan, Christina A. Marsh, Rosnah Binti Zain, Mannil Thomas Abraham, Stephen S. Prime, Soo-Hwang Teo, J. Silvio Gutkind, Vyomesh Patel, Sok Ching Cheong

* Oral Cancer Research Team, Cancer Research Initiatives Foundation (CARIF), 2nd Floor Outpatient Centre, Sime Darby Medical Centre, 47500 Subang Jaya, Selangor, Malaysia
* Oral and Pharyngeal Cancer Branch, National Institutes of Health, Bethesda, MD 20892, United States
* Oral Cancer Research and Coordinating Centre (OCRCC), University of Malaya, 50603 Kuala Lumpur, Malaysia
* Department of Oral Pathology, Oral Medicine and Periodontology, Faculty of Dentistry, University of Malaya, 50603 Kuala Lumpur, Malaysia
* Department of Oral and Maxillofacial Surgery, Hospital Tengku Ampuan Rahimah, Klang, Malaysia
* Department of Oral & Dental Science, Division of Oral Medicine, Pathology & Microbiology, Bristol Dental Hospital & School, Lower Maudlin Street, Bristol BS1 2LY, UK
* Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, University of Malaya, 50603 Kuala Lumpur, Malaysia


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Abstract

MAGE proteins have been shown to be good targets for cancer immunotherapy. We demonstrate that MAGED4B is over-expressed in more than 50% of Oral Squamous Cell Carcinoma (OSCC) tissues and the expression of MAGED4B is associated with lymph node metastasis and poor disease specific survival. OSCC cell lines that over-express MAGED4B promote migration *in vitro*, exhibit an increase in cell growth both *in vitro* and *in vivo*, and are more resistant to apoptosis compared to control cells. Our data suggest that MAGED4B over-expression is a driver in oral carcinogenesis and argues strongly that this protein may represent a potential therapeutic target in OSCC.

Keywords

MAGED4B; Melanoma antigens; Oral Squamous Cell Carcinoma (OSCC); Migration