

Study for the aim of gene therapy of nasopharyngeal carcinoma

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2000 Fiscal Year Final Research Report Summary

Study for the aim of gene therapy of nasopharyngeal carcinoma

Research Project

Project/Area Number

10470353

Research Category

Grant-in-Aid for Scientific Research (B).

Allocation Type

Single-year Grants

Section

一般

Research Field

Otorhinolaryngology

Research Institution

Kanazawa University

Principal Investigator

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Project Period (FY)

1998 - 2000

Keywords

NPC / EBV / BZLF1 / LMP1 / MMP9 / Metastasis / Invasiveness / Gene therapy

Research Abstract

Nasopharyngeal carcinoma (NPC), an epithelial tumor which is characterized by marked geographic and population differences in incidence, is found to be associated with Epstein-Barr virus (EBV) by serologic evidence, and the relationship was confirmed by the detection of EBVDNA and EB-encoded RNAs in NPC cells. While, NPC is highly metastatic carcinoma whose consistent associated with EBV has been established. Latent membrane protein 1 (LMP1), an EBV membrane protein expressed in latent infection is considered to be the EBV oncoprotein. Matrix metalloproteinase 9 (MMP9), one of the MMP families, degrades Type IVcollagen, a major 4 component of extracellular matrix and is believed to be crucial for cancer invasion and metastasis. Although MMP9 is reported to be expressed in a variety of cancers, no reports concerning NPC have been published. We have shown that LMP1 induces MMP9 in vitro cell line, which suggests the possibility of mechanism in which LMP1 of EBV contributes to the metastasis. [▶ More](#)

Research Products (25 results)

All Other
All Publications

[Publications] K.-R.Kim: "Transformation on Madin-Darby canine kidney (MDCK) epithelial cells by Epstein-Barr virus latent membrane protein 1 (LMP1) induces expression of Ets1 and invasive growth"Oncogene. 19. 1764-1771 (2000) ▼

[Publications] T.Horikawa: "Association of latent membrane protein 1 and matrix metalloproteinase 9 with metastasis in nasopharyngeal carcinoma"American Cancer Society. 89(4). 715-723 (2000) ▼

[Publications] S.Murono: "Aspirin Inhibits Tumor Cell Invasiveness Induced by Epstein-Barr Virus Latent Membrane Protein 1 through Suppression of Matrix Metalloproteinase-9 Expression"Chancer Research. 60(May). 2555-2561 (2000) ▼

[Publications] 吉崎智一: "EBウイルス感染と発癌"化学療法の領域. 16(10). 54-60 (2000) ▼

[Publications] A.Tatsumi-Tamori: "Clinical evaluation of staging system for nasopharyngeal carcinoma : comparison of fourth and fifth editions of UICC TNM classification"Annals of Otology, Rhnology and Laryngology. 109(12). 1125-1129 (2000) ▼

[Publications] 古川仍: "Epstein-Barrウイルスによる上咽頭癌の転移活性化機構"耳鼻咽喉科免疫アレルギー(JJIAO). 18(4). 1-5 (2000) ▼

[Publications] T.Yoshizaki: "Elevation of antibody against Epstein-Barr virus genes BRLF1 and BZLF1 in nasopharyngeal carcinoma"J Cancer Res Clin Oncol. 126. 69-73 (2000) ▼

[Publications] 竹下元: "Latent Membrane Protein-1によるMatrix Metalloproteinase-9活性化におけるシスエレメントの解析"耳鼻咽喉科免疫アレルギー(JJIAO). 18(1). 35-40 (2000) ▼

[Publications] 吉崎智一: "転移の分子機構"JOHNS. 16(4). 559-562 (2000) ▼

[Publications] 吉崎智一: "「CLIENT21」17頭頸部腫瘍"中山書店. 10 (2000) ▼

[Publications] 古川仍: "第7回ヘルペス感染症フォーラム"ヘルペス感染症研究会. 5 (2001) ▼

[Publications] 古川仍: "新図解耳鼻咽喉科・頭頸部外科講座 第5巻頭頸部腫瘍"メジカル・ビュー社. 6 (2001) ▼

[Publications] M.Furukawa, S.Murono, H.Takeshita, T.Yoshizaki: "Detection of Epstein-Barr viral genes products, p53 and bcl-2 protein in non-endemic nasopharyngeal carcinoma. Gann Monograph on cancer Research 45"Epstein-Barr virus and human cancer, T.Osato, K.Takada, M.Tokunaga ed. 109-116 (1998) ▼

[Publications] S.Murono, T.Yoshizaki, S.Tanaka, H.Takeshita, C.S.Park, M.Furukawa.: "Detection of Epstein-Barr Virus in Nasopharyngeal Carcinoma by In Situ Hybridization and Polymerase Chain Reaction"Laryngoscope. 107 (4). 523-526 (1998) ▼

[Publications] T.Yoshizaki, H.Sato, M.Furukawa, J.S.Pagano: "The expression of matrix metalloproteinase 9 is enhanced by Epstein-Barr virus latent membrane protein 1"Proc.Natl.Acad.Sci. 95 (3). 3621-3626 (1998) ▼

[Publications] S.C.S.Key, T.Yoshizaki, J.S.Pagano: "The Epstein-Barr Virus (EBV) SM Protein Enhances Pre-mRNA Processing of the EBV DNA Polymerase Transcript."J.of Virology. 72 (11). 8485-8492 (1998) ▼

[Publications] T.Yoshizaki, H.Sato, S.Murono, J.S.Pagano, M.Furukawa: "Matrix metalloproteinase 9 is induced by the Epstein-Barr virus BZLF1 transactivator."Clinical and Experimental Metastasis. 17. 431-436 (1999) ▼

[Publications] Takeshita H., Yoshizaki T.Mikker W.E.Sato H.Furukawa M.Pagano J.S.: "R-Traub N.Matrix Metalloproteinase 9 Expression Is Induced by Epstein-Barr Virus Latent Membrane Protein 1 C-Terminal Activation Regions 1 and 2."Journal of Virology. 73 (7). 5548-5555 (1999) ▼

[Publications] Takeshita H.Furukawa M.Fujieda S.Shoujaku H.Ookura T.Sakaguchi M.Ito H.Mineta H.Harada T.Matsuura H.Saito H.: "Epidemiological research into nasopharyngeal carcinoma in the Chubu region of Japan."Auris Nasus Larynx. 26. 277-286 (1999) ▼

[Publications] S.Murono: "Association of Epstein-Barr virus infection with p53 protein accumulation but not bcl-2 protein in nasopharyngeal carcinoma"Histopathology. 34. 432-438 (1999) ▼

[Publications] T.Yoshizaki., H.Miwa., H.Takeshita., H.Sato., M.Furukawa: "Elevation of antibody against Epstein-Barr virus genes BRLF1 and BZLE1 in nasopharyngeal carcinoma"Cancer Res Clin Oncol. 126. 69-73 (2000) ▼

[Publications] T.Horikawa, T.Yoshizaki, T-S.Sheen, S.Y.Lee, M.Furukawa: "Association of latent membrane protein 1 and Matrix metalloproteinase 9 with metastasis in nasopharyngeal Carcinoma"Cancer. 89 (4). 715-723 (2000) ▼

[Publications] K.-R.Kim, T.Yoshizaki, H.Miyamori, K.Hasegawa, T.Horikawa, M.Furukawa, S.Harada, M.Seiki, H.Sato.: "Transformation on Madin-Darby canine kidney (MDCK) epithelial cells by Epstein-Barr virus latent membrane protein 1 (LMP1) induces expression of Ets1 and invasive growth"Oncogen. 19. 1764-1771 (2000) ▼

[Publications] S.Murono, T.Yoshizaki, H.Sato, H.Takeshita, M.Furukawa, J.S.Pagano: "Aspirin Inhibits Tumor Cell Invasiveness Induced by Epstein-Barr Virus Latent Membrane Protein 1 through Suppression of Matrix Metalloproteinase-9 Expression"Cancer Research 60 (May). 2555-2561 (2000) ▼

[Publications] T.Tamori, T.Yoshizaki, T.Miwa, M.Furukawa: "Clinical evaluation of staging system for nasopharyngeal carcinoma : comparison of fourth and fifth editions of UICC TNM classification. Annals of Otology"Rhinology and Laryngology. 109 (12). 1125-1129 (2000) ▼

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