

2006年(平成18年) 業績

英語論文

Norimasa Sando, Kuniyuki Oka, Takuya Moriya, Hidetoshi Saito, Shigenori Nagakura, Naoyoshi Mori, **Toshimitsu Suzuki**, Hamaiti Ueki, Haruo Ohtani. Osteosarcoma arising in the breast. *APMIS*. Jul-Aug; 114(7-8):581-587, 2006.

Makoto Osanai, Masaki Murata, Nami Nishikiori, **Hideki Chiba**, Takashi Kojima and Norimasa Sawada. Epigenetic silencing of occludin promotes tumorigenic and metastatic properties of cancer cells via modulations of unique sets of apoptosis-associated genes, *Cancer Res*, 66, 9125-9133, 2006.

Yoshimitsu Kitajima, Toshiaki Endo, Kunihiko Nagasawa, Kengo Manase, Hiroyuki Honnma, Tsuyoshi Baba, Takuhiro Hayashi, **Hideki Chiba**, Norimasa Sawada and Tsuyoshi Saito. Hyperstimulation and a gonadotropin-releasing hormone agonist modulate ovarian vascular permeability by altering expression of the tight junction protein claudin-5, *Endocrinology*, 147, 694-699, 2006.

Mengdong Lan, Takashi Kojima, Masaki Murata, Makoto Osanai, Ken-ichi Takano, **Hideki Chiba** and Norimasa Sawada. Phosphorylation of ezrin enhances microvillus length via a p38 MAP-kinase pathway in an immortalized mouse hepatic cell line, *Exp Cell Res*, 312, 110-120, 2006.

Mitsuru Go, Takashi Kojima, Ken-ichi Takano, Masaki Murata, Junichi Koizumi, Makoto Kurose, Ryuta Kamekura, Makoto Osanai, **Hideki Chiba**, David C. Spray, Tetsuo Himi, Norimasa Sawada. Connexin 26 expression prevents down-regulation of barrier and fence functions of tight junctions by Na⁺/K⁺-ATPase inhibitor ouabain in human airway epithelial cell line Calu-3. *Exp Cell Res*, 312, 3847-3856, 2006.

van Driel M, Koedam M, Buuman CJ, Hewison M, **Chiba H**, Uitterlinden AG, Pols HAP, van Leeuwen JPTM. Evidence for auto/paracrine actions of vitamin D in bone: 1 α -hydroxylase expression and activity in human bone cells. *FASEB J*, 20, 2417-2419, 2006.

Imura T, Nakano I, Kornblum HI, Sofroniew MV. Phenotypic and functional heterogeneity of GFAP-expressing cells in vitro: differential expression of LeX/CD15 by GFAP-expressing multipotent neural stem cells and non-neurogenic astrocytes. *Glia*. 2006;53(3):277-93.

Kazuo Watanabe, Toshimitsu Suzuki. Uterine leiomyoma versus leiomyosarcoma : a new attempt at differential diagnosis based on their cellular characteristics. *Histopathology*, 48, 563-568, 2006.

Yu Usami, **Hideki Chiba**, Fumihito Nakayama, Junya Ueda, Yoshiko Matsuda, Norimasa Sawada, Takahide Komori, Akihiko Ito, Hiroshi Yokozaki. Reduced expression of claudin-7 correlates with invasion and metastasis in squamous cell carcinoma of the esophagus. *Hum Pathol*, 37, 569-577, 2006.

van Driel M, Koedam M, Buurman CJ, Roelse M, Weyts F, **Chiba H**, Uitterlinden AG, Pols HA, van Leeuwen JP, Evidence that both 1 α ,25-dihydroxyvitamin D₃ and 24-hydroxylated D₃ enhance human osteoblast differentiation and mineralization. *J Cell Biochem*, 99, 922-935, 2006.

Hideki Chiba, Naoyuki Sakai, Masaki Murata, Makoto Osanai, Takafumi Ninomiya, Takashi Kojima, and Norimasa Sawada. The nuclear receptor hepatocyte nuclear factor 4 α acts as a morphogen to induce the formation of microvilli. *J Cell Biol*, 175, 971-980, 2006.

Kunihiko Nagasawa, **Hideki Chiba**, Hiroki Fujita, Takashi Kojima, Tsuyoshi Saito, Toshiaki Endo, Norimasa Sawada. Possible involvement of gap junctions in the barrier function of tight junctions of brain and lung endothelial cells, *J Cell Physiol*, 208, 123-132, 2006.

Delhanty PJ, van der Eerden BC, van der Velde M, Gauna C, Pols HA, Jahr H, **Chiba H**, van der Lely AJ, van Leeuwen JP. Ghrelin and unacylated ghrelin stimulate human osteoblast growth via mitogen-activated protein kinase (MAPK)/phosphoinositide 3-kinase (PI3K) pathways in the absence of GHS-R1a. *J Endocrinol*, 188, 37-47, 2006.

Hiroki Fujita, **Hideki Chiba**, Hiroshi Yokozaki, Naoyuki Sakai, Kotaro Sugimoto, Takuro Wada, Takashi Kojima, Toshihiko Yamashita and Norimasa Sawada. Differential Expression and Subcellular Localization of Claudin-7, -8, -12, -13, and -15 Along the Mouse Intestine. *J Histochem Cytochem*, 54, 933-944, 2006.

Jansen JH, Jahr H, Verhaar JAN, Pols HAP, **Chiba H**, Weinans H, van Leeuwen JPTM, Stretch-induced modulation of matrix metalloproteinases in mineralizing osteoblasts via extracellular signal-regulated kinase-1/2, *J Orthop Res*, 24,

1480-1488, 2006.

学会発表
国際学会

The 11th International Congress Metastasis Research Society, 2006, Tokushima
Sugino T, Suzuki T, Establishment of murine model for invasion-independent metastasis and evaluation in human cancers.

Experimental Biology, 2006 Apr 1-5, San Francisco, USA.

Nishikiori N, Osanai M, Miyajima H, **Chiba H**, Kojima T, Sawada N. Glial cell line-derived neurotrophic factor (GDNF) regulates the vascular permeability of the blood-retinal barrier (BRB).

Experimental Biology, 2006 Apr 1-5, San Francisco, USA.

Osanai M, Nishikiori N, Murata M, **Chiba H**, Kojima T, Sawada N. Occludin expression inhibits tumorigenicity and metastasis.

The 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, 2006 Jun 18-23, Kyoto.

Chiba H, Sakai N, Murata M, Osanai M, Kojima T, Sawada N. Molecular mechanism of microvilli formation triggered by HNF-4 α and retinoid receptors.

The 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, 2006 Jun 18-23, Kyoto.

Fujita, H, **Chiba H**, Yokozaki H, Sakai N, Sugimoto K, Wada T, Kojima T, Yamashita T, Sawada N. Differential expression profiles of claudins 7, 8, 12, 13 and 15 in the mouse intestine.

CELLS THROUGH BINDING TO GM1. Sapporo Sphingolipid Symposium.
2006.July

Naoki Ichikawa, THE LAMININ \cdot 1 AG73 PEPTIDE PROMOTES NEURITE OUTGROWTH OF PC12.

International symposium on tonsils and mucosal barriers of the upper ways, 2006 Aug 31-Sep 3, Siena, Italia.

Koizumi J, Kojima T, Kurose M, Harimaya A, Konno N, Kamekura R, Takano K, Go M, Murata M, **Chiba H**, Sawada N, Himi T. Tight junctional barrier of human nasal epithelial cells is regulated through a PKC pathway.

The 46th annual meeting of the American Society for Cell Biology, 2006 Dec 9-13, San Diego, USA.

Chiba H, Sakai N, Murata M, Osanai M, Kojima T, Sawada N. The nuclear receptor hepatocyte nuclear factor 4 α acts as a morphogen to induce the formation of microvilli.

The 46th annual meeting of the American Society for Cell Biology, 2006 Dec 9-13, San Diego, USA.

Sugimoto K, **Chiba H**, Fujita H, Sakai N, Kojima T, Yokozaki H, Sawada N. Differential expression patterns of claudin-7, -8, -12, -13 and -15 in the mouse intestine.

国内学会

第 62 回日本病理学会東北支部総会／学術集会、2006.2.11

日下部 崇、眼瞼腫瘍の一例

第 63 回日本病理学会東北支部総会／学術集会、2006.7.29、新潟市

日下部 崇、胸腔内腫瘍の一例

第 65 回日本癌学会学術総会、2006.9.28-30、横浜市

渡辺尚文、杉野隆、鈴木利光、佐藤章

IL-1 β は腹膜中皮に integrin $\beta 1$ の発現を増加させ、卵巣癌の腹膜播種を促進する

第 65 回日本癌学会学術総会、2006.9.28-30、横浜市

杉野 隆 鈴木利光 転移過程における肝細胞癌の形態像

【シンポジウム】

第 25 回分子病理学研究会、2006、東京

杉野 隆、鈴木利光 マウス乳癌を用いた転移モデルの開発と分子メカニズム

【ワークショップ】

第 95 回日本病理学会、2006 年 4 月 29 日-5 月 1 日、東京

小島隆, 村田雅樹, 小山内誠, 千葉英樹, 澤田典均. 黄疸と血液胆汁閉門.

「病態発生とタイト結合とギャップ結合の役割」

症例報告

Chiba H, Kojima T, Osanai M, Sawada N. The significance of

interferon-gamma-triggered internalization of tight-junction proteins in inflammatory bowel disease. Sci STKE, 316: pe1, 2006.

研究費

日本学術振興会科学研究費補助金（基盤研究 B-2）、平成 18 年度
生体バリアとヒト疾患－細胞間隙における分子通過機構の機能分子病理学（課題番号 17390117）。

分担 千葉英樹（代表 小山内誠）

財団法人福島県医学振興会 特定助成事業助成、平成 18 年度
セマフォリンによるがん転移促進機構の解明

代表 杉野 隆

日本学術振興会科学研究費補助金 基盤研究(C)一般、平成 18-19 年度
ヒト癌における肝エックス受容体の発現と糖・脂質代謝の制御（課題番号 18590337）

代表 鈴木利光

分担 星 暢夫、日下部 崇

厚生労働科学研究費助成金 厚生科学基盤研究分野 萌芽的先端医療技術推進研究事業【ナノメディシン分野】、平成 18 年度

がん診断・治療両用高分子ミセルターゲティングシステム

分担 川口 隆憲（代表 横山昌幸）