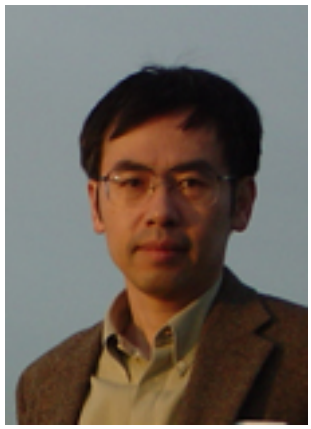
Curriculum Vitae



Name: **Takaomi C. Saido**

Date of Birth: August 7, 1959

Place of Birth: Kobayashi-shi, Miyazaki, JAPAN

Present occupation

Position: Laboratory Head

Institution: Laboratory for Proteolytic Neuroscience
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Education

1978-1982	B.A.	University of Tsukuba
1982-1985 & 1986-1988		
	Ph. D	University of Tokyo Graduate School
1985-1986	Visiting Scholar	Cornell University

Academic appointments

1988-1997	Research Scientist, Tokyo Metropolitan Institute of Medical Science
1992	Visiting Scientist, Scripps Institute
1997-2018	Laboratory Head, RIKEN Brain Science Institute
2018-	Laboratory Head, RIKEN Center for Brain Science
1997-2012	Visiting Professor, Yokohama City Medical School
1997-2006	Visiting Professor, Tohoku University School of Medicine
1999-2009	Visiting Professor, University of Tsukuba School of Medicine
2004	Visiting Professor, University of Nagoya School of Medicine
2005	Visiting Professor, Institute for Frontier Medical Sciences, University of Kyoto
2006	Visiting Professor, Graduate School of Agricultural and Life Sciences, University of Tokyo
2008-	Visiting Professor, Waseda University
2009-2010	Visiting Professor, Japan Women's College
2017-	Visiting Professor, Keio University

Awards and honors

1985	Rotary International Fellowship
1995	Young Investigator Award, Japanese Biochemical Society
2002	Journal of Biochemistry Excellent Paper Prize
2003	BSI Flagship Prize
2003	Neuroscience Research Excellent Paper Prize
2004	Outstanding contributor award, Alzheimer Research Forum
2007	Toshihiko Tokizane Memorial Award
2015	Ando Momofuku Memorial Award

Memberships and committee assignments in professional societies

1982-present	Japanese Biochemical Society
1984-1986	Japanese Biophysical Society
1993-present	Japanese Pharmaceutical Society
1994-present	Society for Neuroscience, USA
1996-present	Councilor, Japanese Society for Dementia (councilor)
1996- present	Japanese Society for Proteases and Inhibitors
1997- present	Japanese Society for Neuroscience
1998- present	Japanese Society for Neurochemistry

Major research interests

Metabolism of amyloid β peptide in brain

Pathophysiological roles of calpain in the brain

Animal models of Alzheimer's disease

Presymptomatic markers for brain aging and Alzheimer’s disease

Publications in international journals (in English only)

1. Toyoshima, S. Saido, T.C., Makishima, F., Osawa, T. (1983). Induction of increased calcium uptake in liposomes having membrane proteins of chicken erythrocytes by S-adenosylmethionine. ***Biochem. Biophys. Res. Commun.*** 114, 1126-1131.
2. Seki, H., Saido, T.C., Iseki, K., Whitney, F., Wong, S. (1984). Uptake kinetics of micro-organisms in the sulfuretum of Saanich Inlet, British Columbia, Canada. ***Arch. Hydrobiol.***, 100, 73-82.
3. Saido, T.C., Toyoshima, S., Osawa, T. (1987). Protein-O-carboxylmethyltransferase from cytosol and membranes of chicken erythrocytes. ***J. Biochem.*** 102, 319-326.

4. Magae, J., Osada, H., Fujiki, H., Saido, T.C., Suzuki, K., Nagai, K., Yamasaki, M., Isono, K. (1990). Morphological changes of human myeloid leukemia K562 cells by a protein phosphatase inhibitor, tautomycin. ***Proc. Japan Acad.*** 66, 209-212.
5. Osada, S., Mizuno, K., Saido, T.C., Akita, Y., Suzuki, K., Kuroki, T., Ohno, S. (1990). A phorbol ester receptor/protein kinase, nPKCη, a new member of the protein kinase C family predominantly expressed in lung and skin. ***J. Biol. Chem.*** 265, 22434-22440.
6. Sorimachi, H., Ohmi, S., Emori, Y., Kawasaki, H., Saido, T.C., Ohno, S., Minami, Y., Suzuki, K. (1990). A novel member of the calcium-dependent cysteine protease family. ***Biol. Chem.*** Hoppe-Seyler 371, 171-176.
7. Kobayashi, Y., Yamamoto, K., Saido, T.C., Kawasaki, H., Oppenheim, J.T., Matsushima, K. (1990). Identification of calcium-activated neutral protease as a processing enzyme of human interleukin 1 α. ***Proc. Natl. Acad. Sci. USA*** 87, 5548-5552.
8. Ohno, S., Akita, Y., Hata, A., Osada, S., Kubo, K., Konno, Y., Akimoto, K., Mizuno, K., Saido, T.C., Kuroki, T., Suzuki, K. (1991). Structural and functional diversities of a family of signal transducing protein kinases, protein kinase C; two distinct classes of PKC, conventional cPKC and novel nPKC. ***Advances in Enzyme Regulation*** 31, 287-303.
9. Mori, A., Aizawa, H., Saido, T.C., Kawasaki, H., Mizuno, K., Murofushi, H., Suzuki, K., Sakai, H. (1991). Site-specific phosphorylation by protein kinase C inhibits assembly-promoting activity of microtubule-associated protein. ***Biochemistry*** 30, 9341-9346.
10. Mizuno, K., Kubo, K., Saido, T.C., Akita, Y., Osada, S., Kuroki, T., Ohno, S., Suzuki, K. (1991). Structure and properties of a ubiquitously expressed protein kinase C, nPKCδ. Eur. ***J. Biochem.*** 202, 931-940.
11. Saido, T.C., Mizuno, K., Suzuki, K. (1991). Proteolysis of protein kinase C by calpain: effect of acidic phospholipids. ***Biomed. Biochim. Acta*** 50, 485-489.
12. Osada, S., Mizuno, K., Saido, T.C., Suzuki, K., Kuroki, T., Ohno, S. (1992). A new member of protein kinase C family, nPKCθ, predominantly expressed in skeletal muscle. ***Mol. Cell. Biol.*** 12, 3930-3938.
13. Suzuki, K., Saido, T.C., Hirai, S. (1992). Modulation of cellular signals by calpain. ***Ann. N. Y. Acad. Sci.*** 674, 218-227.
14. Saido, T.C., Mizuno, K., Konno, Y., Osada, S., Ohno, S., Suzuki, K. (1992). Purification and characterization of protein kinase C ε from rabbit brain. ***Biochemistry*** 31, 482-490.
15. Saido, T.C., Nagao, S., Shiramine, M., Tsukaguchi, M., Sorimachi, H., Murofushi, H., Tsuchiya, T., Ito, H., Suzuki, K. (1992). Autolytic transition of μ-calpain as resolved by antibodies distinguishing between the pre- and post-autolysis forms. ***J. Biochem.*** 111, 81-86.
16. Saido, T.C., Shibata, M., Takenawa, T., Murofushi, H., Suzuki, K. (1992). Positive regulation of μ-calpain action by polyphosphoinositides. ***J. Biol. Chem.*** 267, 24585-24590.
17. Mizuno, K., Saido, T.C., Ohno, S., Tamaoki, T., Suzuki, K. (1993). Staurosporine-related compounds, K252a and UCN-01, inhibit both cPKC and nPKC. ***FEBS Lett.*** 330, 114-116.
18. Sorimachi, H., Toyama-Sorimachi, N., Saido, T.C., Kawasaki, H., Sugita, H., Miyasaka, M., Arahata, K., Suzuki, K. (1993). Muscle-specific calpain, p94, is degraded by autolysis immediately after translation, resulting in disappearance from muscle. ***J. Biol. Chem.*** 268, 10593-10605.

19. Yamaura, I., Tani, E., Saido, T.C., Suzuki, K., Minami, N., Maeda, Y. (1993). Calpain-calpastatin system of canine basilar artery in vasospasm. ***J. Neurosurg.*** 79, 537-543.
20. Saido, T.C., Suzuki, H., Yamazaki, H., Tanoue, K., Suzuki, K. (1993). In situ capture of μ-calpain activation in platelets. ***J. Biol. Chem.*** 268, 7422-7426.
21. Saido, T.C., Yokota, M., Nagao, S., Yamaura, I., Tani, E., Tsuchiya, T., Suzuki, K., Kawashima, S. (1993). Spatial resolution of fodrin proteolysis in postischemic brain. ***J. Biol. Chem.*** 268, 25239-25243.
22. Satake, A., Itoh, K., Shimmoto, M., Saido, T.C., Sakuraba, H., Suzuki, Y. (1994). Distribution of lysosomal protective protein in human tissues. Biochem. ***Biophys. Res. Commun.***, 205, 38-43
23. 23 Akita, Y., Ohno, S., Yajima, Y., Konno, Y., Saido, T.C., Mizuno, K., Chida, K., Osada, S., Kuroki, T., Kawashima, S., Suzuki, K. (1994). Overexpression of Ca2+-independent protein kinase C isozyme, nPKCε increases the secretion of prolactin from thyrotropin-releasing hormone-stimulated rat pituitary GH4C1 cells. ***J. Biol. Chem.*** 269, 4653-4660.
24. Yokota, M., Saido, T.C., Miyaji, K., Tani, E., Kawashima, S., Suzuki, K. (1994). Stimulation of protein-tyrosine phosphorylation in gerbil hippocampus after global forebrain ischemia. ***Neurosci. Lett.*** 168, 69-72.
25. Nagao, S., Saido, T.C.(corresponding author), Akita, Y., Tsuchiya, T., Suzuki, K., Kawashima, S. (1994). Calpain-calpastatin interactions in epidermoid carcinoma KB cells. ***J. Biochem.*** 115, 1178-1184.
26. Sorimachi, H., Saido, T.C., Suzuki, K. (1994). New era of calpain research, discovery of tissue-specific calpains. FEBS Lett., 343, 1-5.
27. Saito, Y., Saido, T.C., Sano, K., Kawashima, S. (1994). The calpain-calpastatin system is regulated differentially during human neuroblastoma cell differentiation to Schwannian and neuronal cells. ***FEBS Lett.***, 353, 327-331.
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29. Saido, T.C., Sorimachi, H., Suzuki, K. (1994). Calpain: new perspectives in molecular diversity and physiological-pathological involvement. ***FASEB J.***, 8, 814-822.
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42. Saito, Y., Maruyama, K., Saido, T.C., Kawashima, S. (1995). N23K, a gene transiently up-regulated during neuronal differentiation, encodes a precursor protein for a newly identified neuropeptide Nociceptin. Biochem. Biophys. ***Res. Commun.***, 217, 539-545.
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46. Yamashima, T., Saido, T.C., Takita, M., Miyazawa, A., Yamano, J., Miyakawa, A., Nishijo, H., Ono, T., Yamashita, J., Yoshioka, T. (1996). Transient brain ischemia provokes Ca2+ mobilization, PIP2 overexpression and calpain activation prior to delayed CA-1 neuronal death in monkeys. ***Eur. J. Neurosci.***, 8, 1932-1944.
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the HMG-box region, and their differential expression in mouse spermatogenesis. ***J. Cell Biol.***, 133, 667-681.

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51. Yokota, M., Saido, T.C., Tani, E., Yamaura, I., Minami, N. (1996). Cytotoxic fragment of amyloid precursor protein accumulates in hippocampus after global forebrain ischemia. J. Cereb. Blood Flow Metabol., 16, 1219-1223.
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55. Lemere, C.A., Lopera, F., Kosik, K.S., Lendon, C.L., Ossa, J., Saido, T.C., Yamaguchi, H., Ruiz, A., Martinez, A., Madrigal, L., Hincapie, L., Arango L., J.C., Anthony, D.C., Koo, E.H., Goate, A.M., Selkoe, D..J., Arango V., J.C. (1996). The E280A Presenilin 1 mutation leads to a distinct Alzheimer's disease phenotype: Increased Aβ42 deposition and severe cerebellar pathology. ***Nature Medicine***, 2, 1146-1150.
56. Maruyama, K., Tomita, T., Shinozaki, K., Kume, H., Asada, H., Saido, T.C., Ishiura, S, Iwatsubo, T., Obata, K. (1996). Familial Alzheimer's disease-linked mutations at Val717 of amyloid precursor protein are specific for the increased secretion of Aβ42(43). ***Biochem. Biophys. Res. Commun.***, 227, 730-735.
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Editorial

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