

研究期間全年度 研究業績

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1. 発表論文等（査読付き論文、著書、総説等の発表状況）

- (1) Synthesis and Preliminary Biological Evaluation of 20-Epi-eldecalcitol [20-Epi-1 α ,25-dihydroxy-2 β -(3-hydroxypropoxy)vitamin D₃: 20-epi-ED-71]
Hatakeyama, S.; Yoshino, M.; Eto, K.; Takahashi, K.; Ishihara, J.; Ono, Y.; Saito, H.; Kubodera N.* *J. Steroid Biochem.* **2010**, *121*, 25-28.
(10.1016/j.jsbmb.2010.03.041)
- (2) Synthesis of 20-Epi-eldecalcitol [20-Epi-1 α ,25-dihydroxy-2 β -(3-hydroxypropoxy)-vitamin D₃: 20-Epi-ED-71]
Yoshino, M.; Eto, K.; Takahashi, K.; Ishihara, J.; Hatakeyama, S.; Ono, Y.; Saito, H.; Kubodera, N.* *Heterocycles* **2010**, *81*, 381-394.
(10.3987/COM-09-11871)
- (3) Indium-catalyzed Conia-ene Reaction and Total Syntheses of Biologically Active Alkaloids
Takahashi, K.; Hatakeyama S.* *J. Synth. Org. Chem. Jpn.* **2010**, *68*, 951-961.
(10.5059/yukigoseikyokaishi.68.951)
- (4) Synthetic Study on Clutilide Based on a Remote Chelation Controlled Ireland-Claisen Rearrangement
Ishihara, J.; Tokuda, O.; Shiraishi, K.; Nishino, Y.; Takahashi, K.; Hatakeyama S.* *Heterocycles* **2010**, *80*, 1067-1079.
(10.3987/COM-09-S(S)86)
- (5) Organocatalytic asymmetric synthesis of quinine and quinidine
Sarkar, S. M.; Taira, Y.; Nakano, A.; Takahashi, K.; Ishihara, J.; Hatakeyama, S.* *Tetrahedron Lett.* **2011**, *52*, 923-927.
(10.1016/j.tetlet.2010.12.066)
- (6) Indium-mediated Reformatsky-Claisen rearrangement
Ishihara, J.; Watanabe, Y.; Koyama, N.; Nishino, Y.; Takahashi, K.; Hatakeyama, S.* *Tetrahedron* **2011**, *67*, 3659-3667.
(10.1016/j.tet.2011.03.079)
- (7) Synthesis of 1-Deoxyeldecalcitol, a Biologically Interesting Analog of 1 α ,25-Dihydroxy-2 β -(3-hydroxypropoxy)vitamin D₃ (Eldecalcitol)
Sasaki, H.; Eto, K.; Takahashi, K.; Ishihara, J.; Hatakeyama, S.; Kubodera, N.* *Heterocycles* **2011**, *83*, 1385-1394.

- (10.3987/COM-11-12189)
- (8) Total Synthesis of NW-G01, a Cyclic Hexapeptide Antibiotic, and 34-epi-NW-G01
Shibahara, S.; Matsubara, T.; Takahashi, K.; Ishihara, J.; Hatakeyama, S.* *Org. Lett.* **2011**, *13*, 4700-4703.
(10.1021/ol201912w)
- (9) Total Synthesis of Oxazolomycin A
Eto, K.; Yoshino, M; Takahashi, K.; Ishihara, J.; Hatakeyama, S.* *Org. Lett.* **2011**, *13*, 5398-5401.
(10.1021/ol202306d)
- (10) Process Development for the Practical Production of Eldecalcitol by Linear, Convergent and Biomimetic Syntheses
Kubodera, N.; Hatakeyama, S. *Anticancer Res.* **2012**, *32*, 303-310.
- (11) Total Synthesis of (-)-Kaitocephalin Based on a Rh-Catalyzed C-H Amination
Takahashi, K.; Yamaguchi, D.; Ishihara, J.; Hatakeyama, S.* *Org. Lett.* **2012**, *14*, 1644-1647.
(10.1021/ol300431n)
- (12) Stereoselective Synthesis of the Fused γ -Lactone/ δ -Lactone Core of Ophiodilactones
Matsubara, T.; Takahashi, K.; Ishihara, J.; Hatakeyama, S.* *Heterocycles* **2012**, *86*, 155-158.
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[著書]

(Aza)-Morita-Baylis-Hillman Reactions
Hatakeyama, S. In *Science of Synthesis: Asymmetric Organocatalysis 1*; List, B. Ed.; George Thieme Verlag: Stuttgart, 2011, 2011/5, 1.1.16, pp 673-721.

2. 学会発表等（国内外の招待講演および国際会議での発表状況）

- (1) New variant of Reformasky-Claisen rearrangement mediated by indium chloride
Ishihara, J.; Watanabe, Y.; Koyama, N.; Nishino, Y.; Takahashi, K.; Hatakeyama, S. The 2010 International Chemical Congress of Pacific Basin Societies, Hawaii, USA, 2010.12.15-20 (ポスター発表).
- (2) Total synthesis of chloptosin
Shibahara, S.; Matsubara, Takahashi, K.; Ishihara, J.; Hatakeyama, S. The 2010 International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, USA, 2010.12.15-20 (ポスター発表).

- (3) Synthetic study on the oxazolomycin family of compounds
Eto, K.; Yoshino, M.; Takahashi, K.; Ishihara, J.; Hatakeyama, S. The 2010 International Chemical Congress of Pacific Basin Societies, Honolulu, Hawaii, USA, 2010.12.15-20 (ポスター発表).
- (4) Process Development for the Practical Production of Eldecalcitol by Linear Convergent and Biomimetic Syntheses
Kubodera, K.; Hatakeyama, S. The 4th International Symposium on Vitamin D and Analogs in Cancer Prevention and Therapy, Homburg, Germany, 2011.5.20-21 (ポスター発表).
- (5) New Variant of Reformasky-Claisen Rearrangement Mediated by Indium Chloride
Ishihara, J.; Watanabe, Y.; Koyama, N.; Nishino, Y.; Takahashi, K.; Hatakeyama, S., 22nd French-Japanese Symposium of Medicinal and Fine Chemistry, Rouen, France, 2011.9.11-14 (ポスター発表).
- (6) Organocatalytic Asymmetric Synthesis of Inthomycin A,B and C
Kohei Eto, K.; Yoshino, M.; Takahashi, K.; Ishihara, J.; Hatakeyama, S. 8th AFMC International Medicinal Chemistry Symposium, Tokyo, Japan, 2011.11.29-12.2 (口頭発表).

5. 受賞等

- (1) 芝原撮也 (博士3年)
ポスター発表優秀賞 第20回万有福岡シンポジウム、2010.5.22
- (2) 吉野円香 (修士2年)
優秀発表賞 第27回日本薬学会九州支部大会、2010.12.11
- (3) 江藤康平 (博士2年)
優秀発表賞 第9回次世代を担う有機化学シンポジウム、2011.5.28