and three genes from *Enterococcus faecalis* V583 were predicted to encode homologs of the β-ketoacyl-acyl carrier protein synthases I or II or III of *Escherichia coli* (FabB or FabF, or FabH) were identified in the genomic database. The protein products were expressed, purified, and biochemically characterized. εFabH and hFabH carried out the initial condensation reaction of fatty acid biosynthesis with acetyl-Coenzyme A as a primer, and hFabB and εFabF1 carried out the elongation condensation reaction of fatty acid biosynthesis with myristoyl-ACP.

[PC1-12] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

Purification and Characterization of Dermatan Sulfate from Eel Skin, *Anguilla japonica*

Lee In Seon¹, Sakai Shinobu², Kim Wan Seok¹, Nakamura Ayako², Imanari Toshio², ToidaToshihiko², Kim Yeong Shik¹*

¹Natural Products Research Institute, College of Pharmacy, Seoul National University, Seoul 110-460.
²Department of Bioanalytical Chemistry, Graduate School of Pharmaceutical Sciences, Chiba University, Chiba 263-8522, Japan

Dermatan sulfate (DS) was isolated from eel skin (*Anguilla japonica*) by actinase and endonuclease digestions followed by β-elimination reaction and DEAE-Sephalac chromatography. DS was a major glycosaminoglycan in eel skin with 88% of the total uronic acid. The content of IdoA2Sα1→4GalNAc4S sequence in eel skin, which is known to be a binding site to heparin cofactor II, was two times higher than that of dermatan sulfate from porcine skin. The anti-Ila activity of eel skin dermatan sulfate mediated through heparin cofactor II (HClI) was 25 units/mg, whereas DS from porcine skin shows 23.2 units/mg. The average molecular weight was determined as 14 kDa by gel chromatography on a TSKgel G3000SWXL column. Based on H1 NMR spectroscopy, we suggest that 3-sulfated and/or 2,3-sulfated IdoA residues are present in the chain.

[PC1-13] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

Induction of apoptosis in human promyelocytic leukaemia HL-60 cells by manassatin B involves release of cytochrome c and activation of caspases

Seo borim⁰, Lee kyungtae

College of pharmacy, Kyung-Hee University, Seoul,130-701

Manassatin B classified into dioneolignans have been isolated from Saururus chinensis Manassatin B was found to induce apoptosis in human promyelocytic leukaemia HL-60 cells with characteristic apoptotic features like increase of nucleosomal ladder, apoptotic body formation, flipping of membrane phosphatidylserine. Manassatin B induced FAS and FAS ligand expression, and activated caspase 8 which cleaved bid to btd in cytosol. The release of cytochrome c to cytosol was accompanied with decrease of bcl-2 protein and increase of btd and bax protein in mitochondria. Released cytochrome c activated caspase 9 and -3, but these effects were completely attenuated by the treatment of broad caspase inhibitor, Z-VAD fmk. These results indicate that manassatin B induce apoptosis through upregulation of FAS, caspase family and mitochondria -related proteins.

[PC1-14] [10/17/2002 (Thr) 13:30 - 16:30 / Hall C]

Induction of Differentiation in HL-60 Human leukemia cells by Acteoside.

Lee kyungwon⁰ Choi junghee Lee kyungtae Lee yongsup* Kim hyoungja* Pak heejuhn**

College of Pharmacy, Kyung Hee University, Seoul 130–701, Korea, *Division of Life Sciences, Korea Institute of Science and Technology, Seoul 130–650, Korea, **Division of Applied Science, Sanji University, Wonju 220–702,

Korea