

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. eFabH and hFabH carried out the initial condensation reaction of fatty acid biosynthesis with acetyl-Coenzyme A as a primer, and hFabB and eFabF1 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*

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Dermatan sulfate (DS) was isolated from eel skin (*Anguilla japonica*) by actinase and endonuclease digestions followed by β -elimination reaction and DEAE-Sephacel chromatography. DS was a major glycosaminoglycan in eel skin with 88% of the total uronic acid. The content of IdoA2S α 1 \rightarrow 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-IIIa activity of eel skin dermatan sulfate mediated through heparin cofactor II (HCII) 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

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Manassantin B classified into dineolignans have been isolated from *Saururus chinensis* Manassantin 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. Manassantin B induced FAS and FAS ligand expression, and activated caspase 8 which cleaved bid to tbid in cytosol. The release of cytochrome c to cytosol was accompanied with decrease of bcl-2 protein and increase of tbid 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.

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