P-4: Molecular Docking Several Xanthone Compounds from Garcinia mangostana Linn. To Plasmepsin (Poster Presentation) - The 3rd Gruber-Soedigdo Lecture 2010 : Molecular biotechnology in Medicine & Bioindustry 27-30 July 2010)

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ABSTRACT

Plasmepsin is a prime enzyme in malarial parasite life cycle. Plasmepsins are worked in the hemoglobin degradation inside the food vacuole during the erythrocytic phase. The structures of this enzyme are available through crystallography and show that these structures have an active site which allows many of probabilities of ligand interactions. Xanthone, a compound of active polyphenolic from Garcinia mangastana Linn. and a Xanthone compound which is isolated from Garcinia mangastona Linn. show an inhibition activity to Plasmadium falciparum through the in vitro method. In this research, the molecular docking method is used to study about inhibiton activity of the enzyme. Molecular docking result of Xanthone analogues to plasmepsin shows that more than one hydrogen bond are involved in the inhibition process.