เอกสารอ้างอิง

จันทร์เพ็ญ เดชะอำไพ "การผลิตกรด 6-อะมิโนเพนนิซิลานิก โดยใช้เซลล์ Escherichia coli ที่ถูกตรึง," วิทยานิพนธ์หลักสูตรปริญญาวิทยาศาสตร์มหาบัณฑิต ภาควิชาชีวเคมี จุฬาลงกรณ์มหาวิทยาลัย, 2529.

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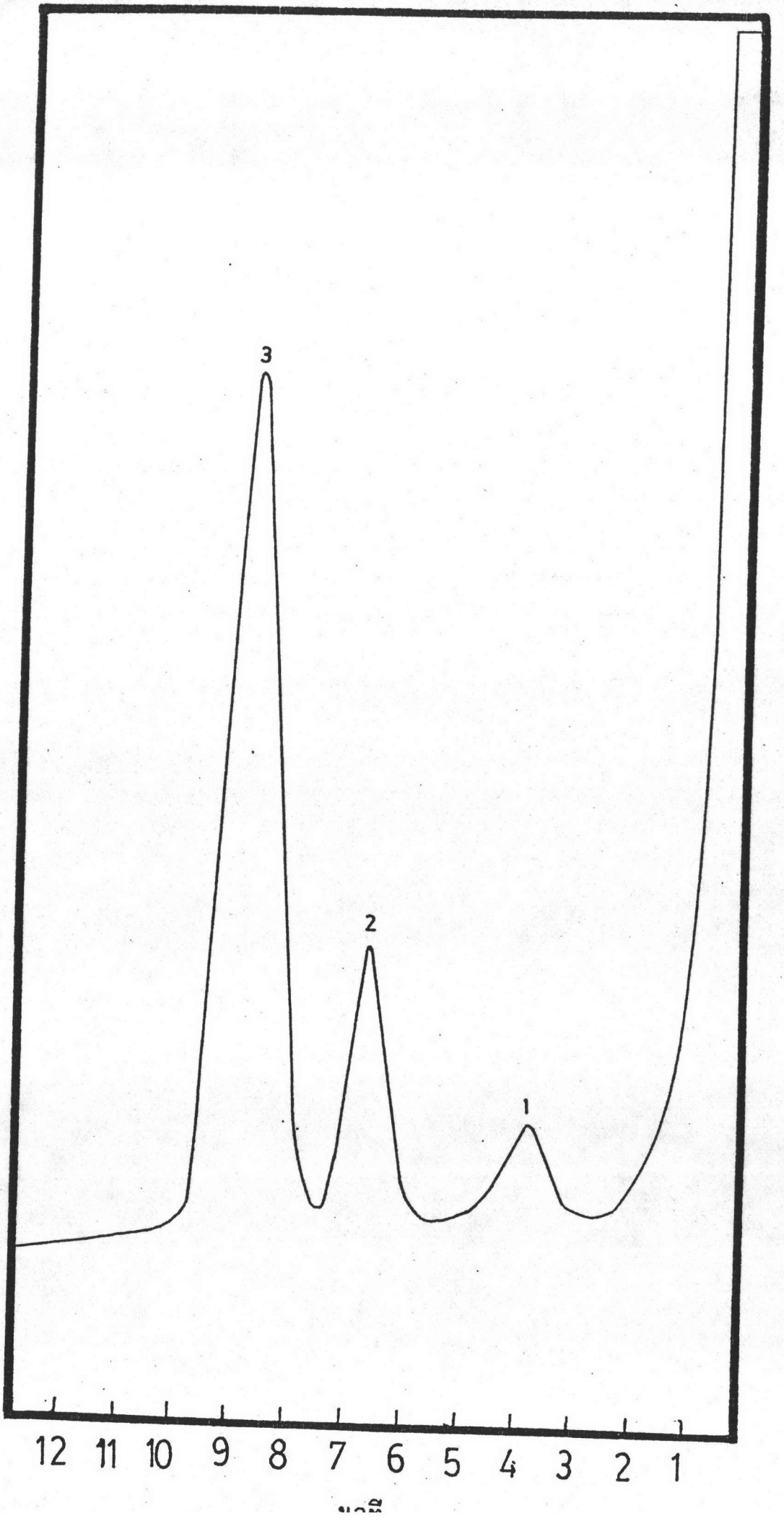
ภาคผนวกที่ 1 ลักษณะของโครมาโตแกรมของกรด 3 แอลฟา 15 เบตา-ไดไฮดรอกซี-5 เบตา-โคลานิก ที่ได้จากปฏิกิริยาการแปรรูปกรดลิโทโคลิกของ C.blakesleeana ST-22 เมื่อใช้กรดดีออกซีโคลิกเป็นสารมาตรฐาน วิเคราะห์โดยเครื่องแกสโครมาโตกราฟฟี

peak 1 ได้แก่ กรดลิโทโคลิก (LCA) นาทีที่ 3.5

peak 2 ได้แก่ กรดดีออกซีโคลิก (DCA) นาทีที่ 6.0

peak 3 ได้แก่ กรด 3 แอลฟา 15 เบตา-ไดไฮดรอกซี-5 เบตา โคลานิก (กรด 3α,15β-DHC) นาทีที่ 8.0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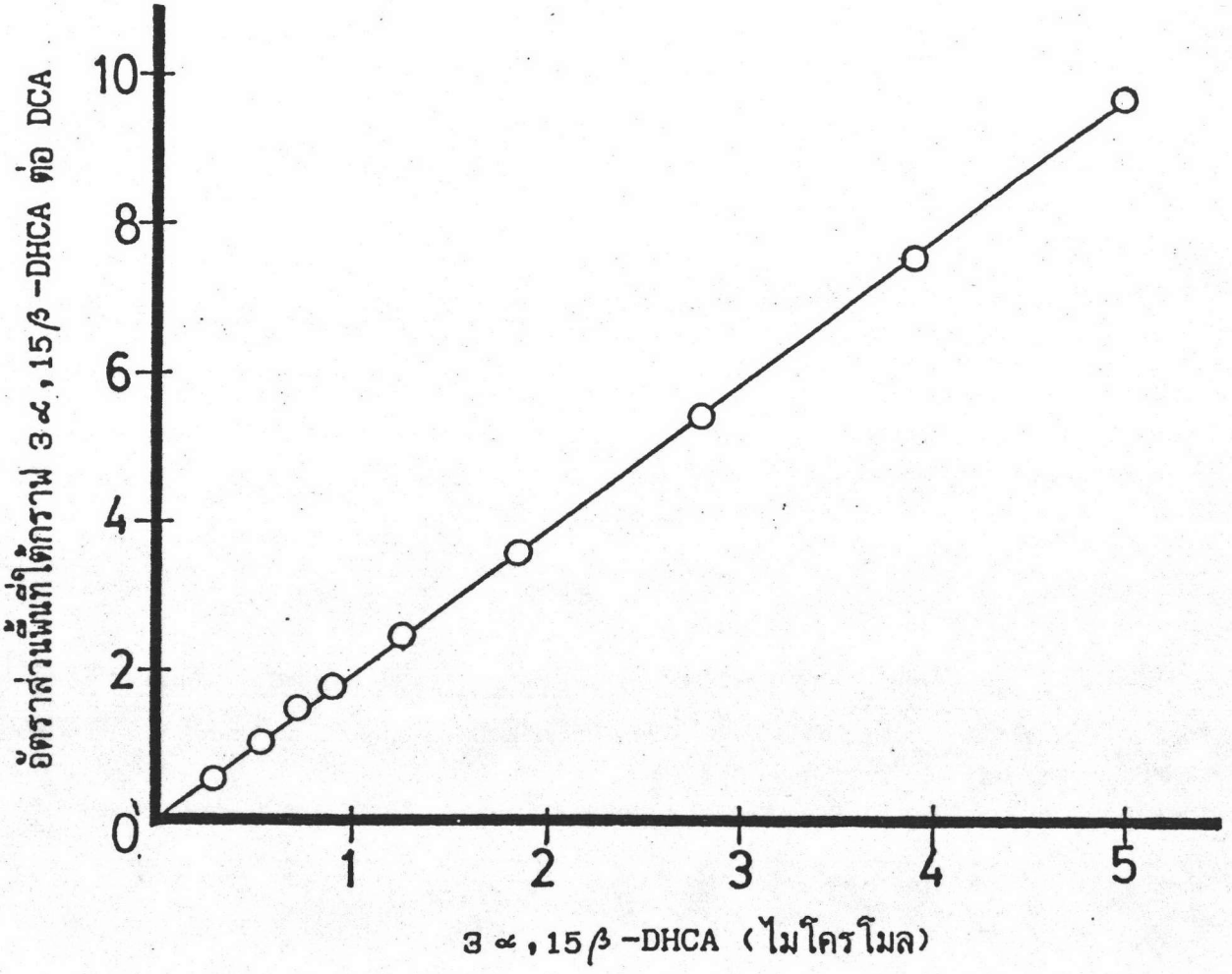
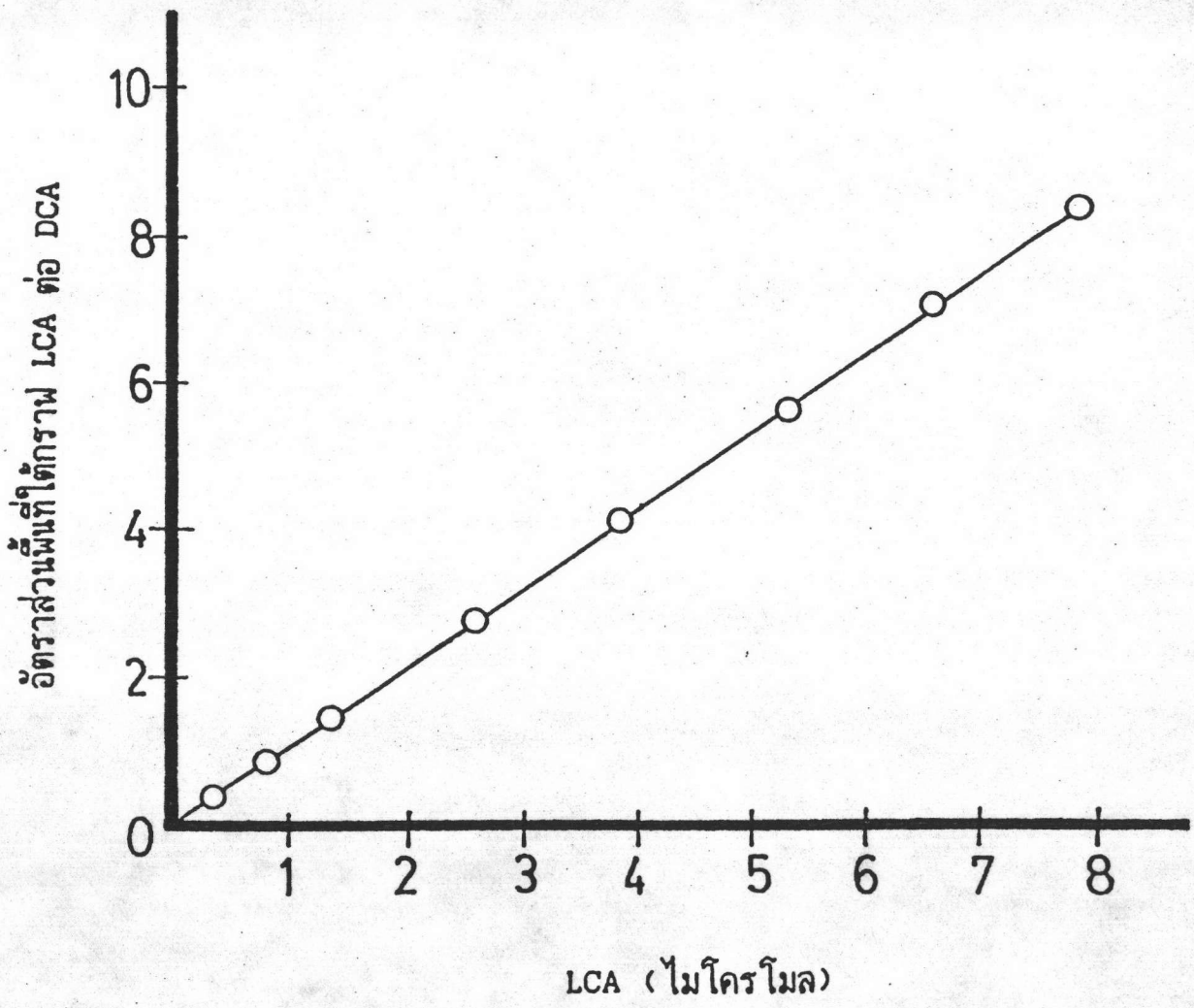
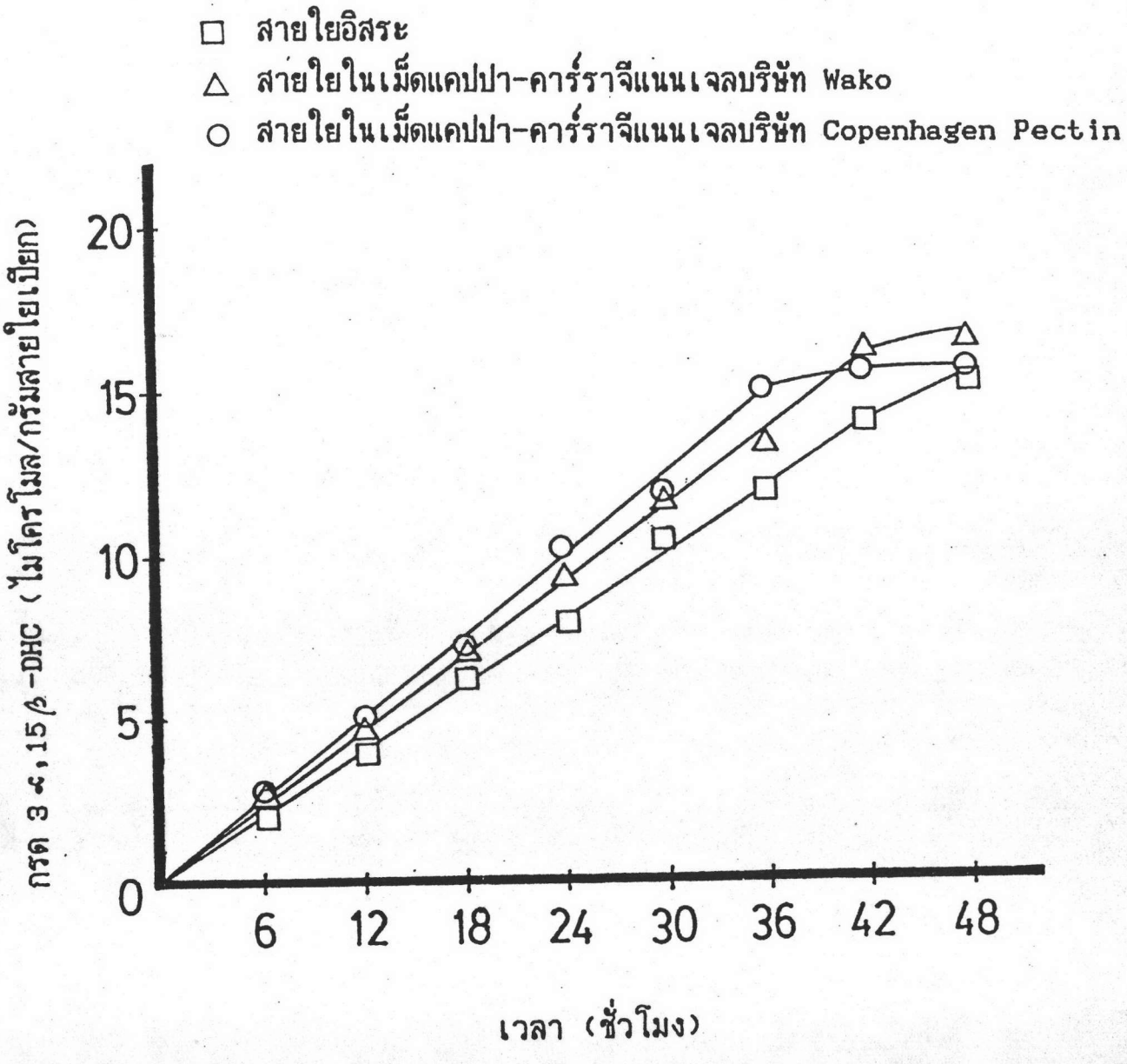


ภาคผนวกที่ 2 กราฟมาตรฐานสำหรับหาปริมาณกรด 3∝,15β-DHC



ภาคผนวกที่ 3 กราฟมาตรฐานสำหรับหาปริมาณกรดลิโทโคลิก



ภาคผนวกที่ 4 รูปแบบการแปรรูปกรดลิโทโคลิกเป็นกรด 3∝,15β-DHC ของ C.blakesleeana ST-22 ในสารผสมปฏิกิริยาที่มีความเข้มข้นกรดลิโทโคลิก เท่ากับ 2.0 กรัมต่อลิตร

ประวัติ

นางสาว กุสุมา วงค์ศรีศาสตร์ เกิดวันที่ 18 กันยายน พ.ศ. 2504 ในจังหวัดกรุงเทพมหานคร ได้รับปริญญาวิทยาศาสตร์บัณฑิต สาขาชีวเคมี จากคณะวิทยาศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2526