

THE EXISTENCE OF RETINOL BINDING PROTEIN  
IN RAT LIVER LYSOSOME

BY

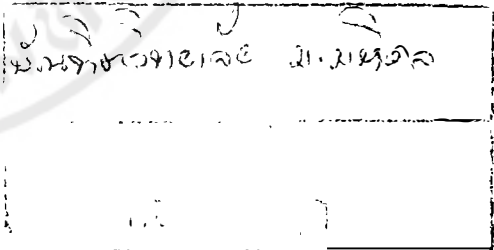
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENT FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

IN

BIOCHEMISTRY



FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY

1984

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ABSTRACT

Rat liver cytosol retinol binding protein (cRBP) was purified to 2,500 folds by column chromatography with the isoelectric point of 4.7 as analysed by isoelectric focusing. Another soluble retinol binding protein was found in the lysosome of rat liver pretreated with radioactive vitamin A. The molecular weight of this lysosomal retinol binding protein was estimated by gel filtration and was found to be 14,000 daltons which was the same as that of cRBP. Preliminary studies on these properties suggest that this lysosomal retinol binding protein is different from the cRBP. The amount of lysosomal retinol binding protein was found to be 10% of total cellular RBP.

The biological significance of lysosomal retinol binding protein requires further study.