

The Lac Operon - (Lacop54.tbk, Lacop.ico, Lacop.doc)

This Toolbook is a simulation of the important features of the lac operon. It demonstrates, using animations, the components of this operon and the features of the control of transcription. Control exercised by lactose and mediated through the allolactose and the lac repressor are illustrated. Control exercised by glucose and mediated through cyclic AMP and catabolite activator protein are also illustrated. The toolbook emphasizes the intermolecular interactions that can and cannot take place under different conditions. The toolbook ends with a quiz of twenty questions designed to test understanding of the material illustrated. The simulation is suitable for first or second year Science, Medical or Dental students following a course in which Biochemistry is a component.

Dr J M Basford, Department of Biochemistry, University of Wales, Cardiff
Further enquiries: Email - Basford@Cardiff.ac.uk

2. Haemostasis

This Toolbook is a simulation of the important features of haemostasis. It demonstrates, using animations, the involvement of platelets components of this operon and the features of the control of transcription. Control exercised by lactose and mediated through the allolactose and the lac repressor are illustrated. Control exercised by glucose and mediated through cyclic AMP and catabolite activator protein are also illustrated. The toolbook ends with a quiz of twenty questions designed to test understanding of the material illustrated. The simulation is suitable for first or second year Science, Medical or Dental students following a course in which Biochemistry is a component.

Dr J M Basford, Department of Biochemistry, University of Wales, Cardiff
Further enquiries: Email - Basford@Cardiff.ac.uk