

## **2 Formulation of questions**

A mammalian cell expresses two closely related but genetically distinct isoforms of topoisomerase II ( $\alpha$  and  $\beta$ ). There are some indications that in mitosis the  $\text{II}\alpha$  isoform plays a crucial role, whereas the function of the  $\text{II}\beta$  isoform has not yet been established. In the first section of the thesis I have investigated whether the function of these isoforms in mitosis was unique. Our group has previously observed in a tumour cell line that the  $\text{II}\alpha$  isoform may associate with the centrosomes. In the light of this observation I have examined the centrosomal protein and its relation to topoisomerase  $\text{II}\alpha$ .