## **Table of contents**

Chapter 1: General introduction	7
Chapter 2: Detecting cAMP-induced Epac activation by fluorescence resonance energy transfer: Epac as a novel cAMP indicator	29
<b>Chapter 3:</b> An activation specific antibody for the cAMP responsive guanine nucleotide exchange factor Epac	43
Addendum: Characterization of monoclonal antibodies against Epac1	54
Chapter 4: Ezrin is an Epac1-anchoring protein that couples receptor activation to Rap1 signalling	57
Addendum: Cell scattering induces nuclear accumulation of Epac1	75
Chapter 5: General discussion	<b>79</b>
Summary Curriculum Vitae List of publications Acknowledgements	86 91 92 93