

ACKNOWLEDGEMENTS

I am grateful to Dr. Katsuo Furukubo-Tokunaga for his helpful advice and critical discussion through the doctoral study.

I also thank Dr. Yuzuru Oguma, Dr. Toshiki Makioka and Dr. Yoshimasa Tanaka for their helpful supervision, and Dr. Liria M. Masuda-Nakagawa for sharing the data on phalloidin staining.

I am also grateful to Dr. Fumiaki Maruo for his helpful advices in experiments and Dr. Osamu Numata and Dr. Hideyuki Okano for their encouragement. I also thank Dr. Tomoko Nagao, Mr. Yoshitsugu Adachi, Mr. Hiroshi Kawauchi, and Mrs. Kejun Meng for their help.

I also thank to Drs. T. Awasaki, K. Ito, W. Gehring, U. Walldorf, N. Bonini, F. Pignoni, C. Goodman, G. Mardon, C. O'Kane, K. Kaiser, R. Davis, C. Hama, A. Nose, S. Sone, Y. Engström, H. Bellen, as well as the Bloomington Stock Center and Developmental Studies Hybridoma Bank for fly stocks and antibodies.

Finally, I express my sincere thanks to Dr. Masataka Okabe for his kind support and helpful advices in experiments.