



Department of Medical Laboratory Science and Biotechnology,
College of Medicine, National Cheng Kung University
Tainan, Taiwan, 701 R. O. C.
TEL:886-6-2353535-5781 FAX:886-6-2363956

Associate Professor Pin Ling

E-mail: lingpin@mail.ncku.edu.tw



Education

Post-doctoral fellow, University of Texas, MD Anderson Cancer Center

Ph.D., Baylor College of Medicine (U.S.A.)

Research Interests

1. Identification and characterization of novel innate immune regulators.

Our lab has identified a novel TBK1-interacting protein, termed TAPE (TBK1-Associated Protein in Endolysosomes). Expression of TAPE activates three major innate immune signaling pathways, including NF- κ B, Erk and TBK1, thereby leading to cytokine production and the antiviral state. In addition, TAPE is involved in linking TLR3 and TLR4 to type I interferon production. Currently we are exploring the roles of TAPE in other innate immune pathways.

2. Interactions between viruses and the host innate immune system

Another research interest in the lab is to study how the innate immune system interacts with Influenza A virus and Dengue virus at the early stage of infections. Especially, we focus on determining how viral components counteract antiviral innate immune responses.

Publications

1. Chang, C.-H., Lai, L.-C., Cheng, H.-C., Chen, K.-R., Syue, Y.-Z., Lu, H.-C., Lin, W.-Y., Chen, S.-H., Huang, H.-S., Shiau, A.-L., Lei, H.-Y., Qin, J., and Ling, P. (2011). TBK1-Associated Protein in Endolysosomes (TAPE) is an innate immune regulator modulating the TLR3 and TLR4 signaling pathways. *J. Biol. Chem.* 286:7043-7051.
2. Lin, L.-H., Ling, P., Liu, M.-F. (2011). The potential role of interferon-regulatory factor 7 among Taiwanese patients with systemic lupus erythematosus. *J. Rheumatology* 38:9-15.
3. Huang, W.-Y., Su, Y.-H., Yao, H.-W., Ling, P., Tung, Y.-Y., Chen, S.-H., Wang, X., and Chen, S.-H. (2010). Beta interferon plus gamma interferon efficiently reduces acyclovir-resistant herpes simplex virus infection in mice in a T-cell-independent manner. *J. Gen. Virol.* 91:591-598.
4. Ling, P., Lu, T.-J., Yuan, C.-J., and Lai, M.-D. (2008). Biosignaling of mammalian Ste20-related kinases. *Cell. Signal.* 20:1237-1247.
5. Li, Z.-H., Li, C.-M., Ling, P., Shen, F.-H., Chen, S.-H., Liu, C.-C., Yu, C.-K., and Chen, S.-H. (2008). Ribavirin reduces the mortality of Enterovirus 71-infected mice by decreasing viral replication. *J. Infect. Dis.* 197:854-857.