



## Title of Invention

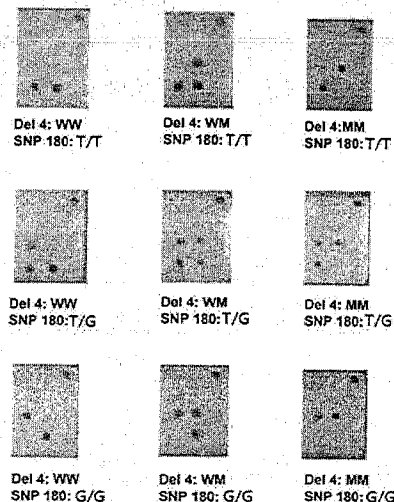
PI : Associate Prof. Wang, Lih-Chiann  
School of Veterinary Medicine, National Taiwan U.

### Experience:

<https://sites.google.com/view/wlclab>

### Market Needs:

There are no any related products in canine MDR1 detection in Taiwan. The genotypes of MDR1 influence the medicine safety, including many kinds of parasiticides and chemotherapy drugs. The genotype detection before treatment is imperative, which could decrease the adverse effects and life loss. Therefore, there are market needs.



### Our Technology:

We can precisely and simultaneously detect the genotypes at two MDR1 loci using the designed gene chip primers and probes via the high sensitivity and specificity chip platform, including the WW/WM/MM of nt230(del14) and TT/TG/GG of SNP180. The genotype detection could attain the prediction purpose for drug tolerance in dogs, avoiding the drug injury.

### Strength:

The detection of the genotypes on two canine MDR1 loci simultaneously using gene chip is a creative breakthrough, saving lots of time on gel-running, sequencing and alignment analysis. The cost can be cut down to half and the time could be decreased from 4 days to half a day. This research constructed a low cost, easy processing, high specificity and high sensitivity detection model, possessing the prominent strengths.

### Competing Products:

There have been no any competitive products in markets so far.

### Intellectual Properties:

We have 12-year experience, owing 5 related patents (US10,017,830 B2, US10,017,830 B2, ROC I2617810, ROC I531654, ROC I372784).

### Contact (do not need to fill out):

Center for Industry-Academia Cooperation, NTU  
Tel: 02-3366-9945, E-mail: [ntuciac@ntu.edu.tw](mailto:ntuciac@ntu.edu.tw)