The transgenic mice of Alzheimer's disease

＊ A **genetically modified mouse** is a mouse that has had its genome altered through the use of genetic engineering techniques.

＊ Genetically modified mice are commonly used for research or as **animal models of human diseases**.

Our lab of Alzheimer's disease transgenic mice model

1.Where are the transgenic mice come from?

2.The environment of IVC.

3.Breeding and mating

4.Genotyping

The Jackson Laboratory

Leading the search for tomorrow's cures

- Mice strains : C57BL/6J

- Double transgenic mice : APP/PS1

  mouse/human amyloid precursor protein (Mo/HuAPP695swe)
  mutant human presenilin 1 (PS1-dE9)

- "humanized"

獨立通透式飼養籠（IVC）

Mating & Breeding

Normal mice

Alzheimer's disease mice model

Picture1 .2 :3-4 day
Picture3 :3 week
Picture4 :8 week

Genotyping

Step 1 . Tail DNA extraction

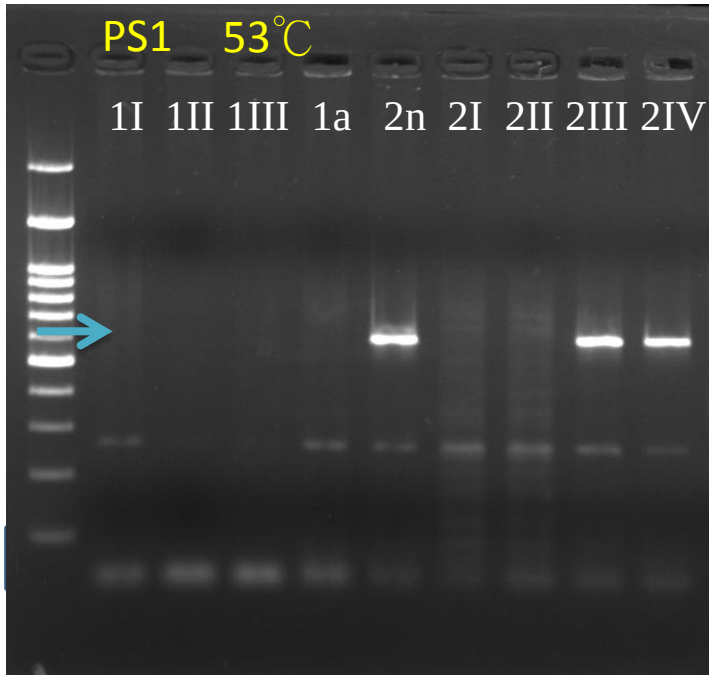
Step 2 . Standard PCR

PSEN1

Sense : AGG ACT GAC CAC TCG ACC AG
Antisense : CGG GGG TCT AGT TCT GCA T
Expected Results ~**608** bp
Annealing temperature : 52˚C

APP

Sense : AAT AGA GAA CGG CAG GAG CA
Antisense : GCC ATG AGG GCA CTA ATC AT
Expected Results ~**377** bp
Annealing temperature : 54˚C



Welcome you to join !