

Qexp-MDx ALDH2 Genotyping Kit

In 1981, Japanese scientist Dr. Harada discovered that people who lack **Acetaldehyde Dehydrogenase (ALDH2)** will flush when drinking alcohol. This phenomenon is called **Alcohol Intolerance**. According to a study by the Stanford University School of Medicine, people with a **genetic condition** in the *ALDH2* gene (**ALDH2 Deficiency**) are easy to skin flush after drinking. If they drink 2 glasses of red wine a day, the risk ratio of head and neck cancer and esophageal cancer will be 50 times higher than normal.

WHY it is such high in the Asian region?

According to research, the **genetic variation of ALDH2** can be traced back to about 2000 to 3000 years ago, to the Baiyue ethnic group in China. Where it caused high alcohol intolerance proportions in the Han descendants., Up to half of the population in Taiwan suffers from this type of genetic variation, making it the country with the highest rate of alcohol intolerance in the world.

WHAT are the risks of ALDH2 Deficiency?

In 2007, the WHO listed **acetaldehyde** converted from alcohol as a primary carcinogen. Due to acetaldehyde, a product of **incomplete metabolism of alcohol**, people with **genetic conditions in ALDH2** are prone to drunkenness, hangovers, headaches after drinking, and rapid heartbeat. In addition, they may have continuously **higher risks** of cancer, stroke, Fanconi Anemia, Myocardial infarction, Heart failure, Peripheral artery disease, depression, diabetes and its syndromes, Alzheimer's disease, Parkinson's disease, and other diseases as acetaldehyde accumulate.

3 STEPs to know your genotype

Sample Collection

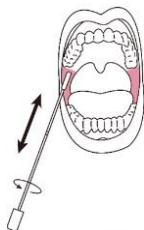
Saliva



Blood



Buccal



Direct PCR

Qamp_{mini} Thermal Cycler

- ✓ Pre-program chip
- ✓ One-button start!
- ✓ Save time!
- ✓ Easy to use!



Results Analysis

Qsep Series Fragment Analyzer



Q-Analyzer

- 1 ✓ User-friendly
- 2 ✓ 3 steps complete
- 3 ✓ Automated reporting

Qexp-MDx ALDH2 Genotyping Kit "Features"

Extraction Free Direct PCR

No need for nucleotide extraction
Start PCR after simple lysis
Save time and make it easier to operate
Genetic Testing as life

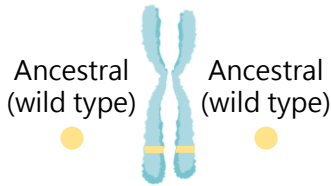


Multiple Targets

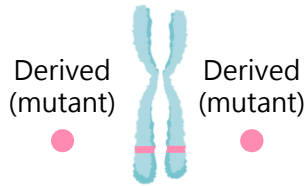
Multiplex PCR in one tube

Qsep series-Fragments Analysis

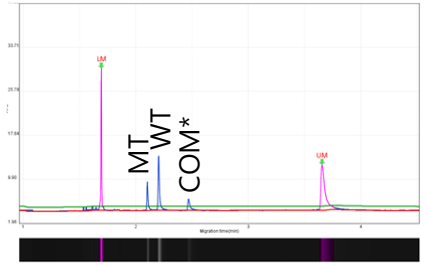
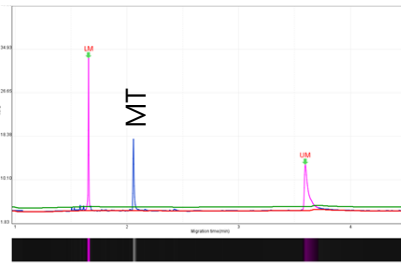
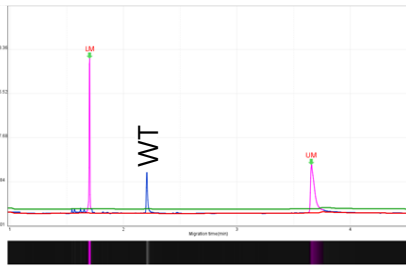
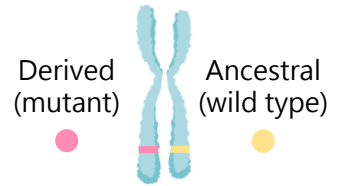
Allele
Wild type/Wild type



Allele
Mutant type/Mutant type



Allele
Wild type/Mutant type
(Hetero form)



* COM: common band

Order Information

Catalog No.	Product	Unit
C900100-24 C900100-48	Qexp-MDx ALDH2 Genotyping Kit (Blood)	24 rxn 48 rxn
C903101-024 C903101-048	Qexp-MDx ALDH2 Genotyping Kit (Saliva)	24 rxn 48 rxn
C903102-024 C903102-048	Qexp-MDx ALDH2 Genotyping Kit (Oral Swab)	24 rxn 48 rxn
C310200	Qamp _{mini} Thermal Cycler	1 set
C100001	Qsep ₁ Bio-Fragment Analyzer	1 set
C100001-L	Qsep ₁ -Lite Bio-Fragment Analyzer	1 set

