EDGC
Eone diagnomics genome center

Epi Clock

Epigenetic Methylation Aging Analysis Service

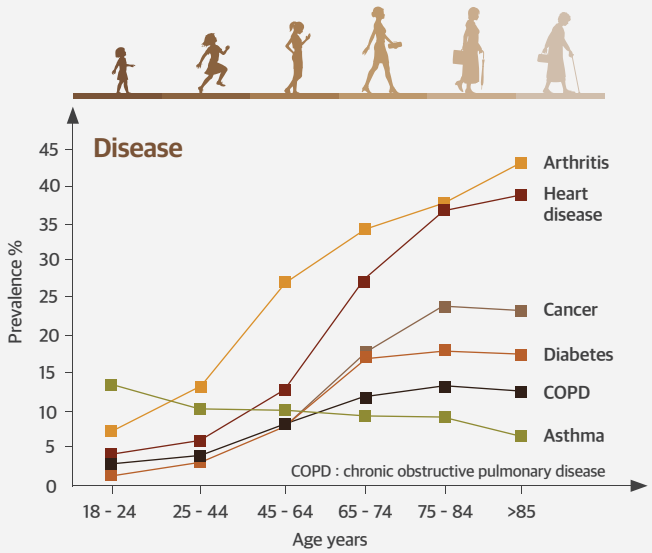
Confirming your biological age marks the beginning of
aging management for reverse aging

EPI-CLOCK

Epigenetic biological age analysis service

Relationship between aging and disease

Aging is the root cause of all diseases. As we age, the incidence of diseases, such as cancers, heart disease, and diabetes increases rapidly. Particularly, the risk for Alzheimer's disease rises significantly after the age of 60.



Causes of Aging

Almost all of our genetic information, about 99.9%, stays the same throughout our entire life. However, there are small changes called 'epigenetic marks' that help to control how our genes are regulated. These marks also affect how we age and how healthy we are. Things like, what we eat, if we smoke or drink, and how stressed we are, can change these marks. So taking care of how we live can help us control how we age.

Epigenetics?

Epigenetics is a study of how things we experience can change how our genes are regulated. Genes are the instructions for how we develop over time, but sometimes things in our environment can make them work differently. This can even be passed on to our children. So when we look at our g enes through epigenetic analysis, the results can be influenced by how we live now and also by how our parents lived.

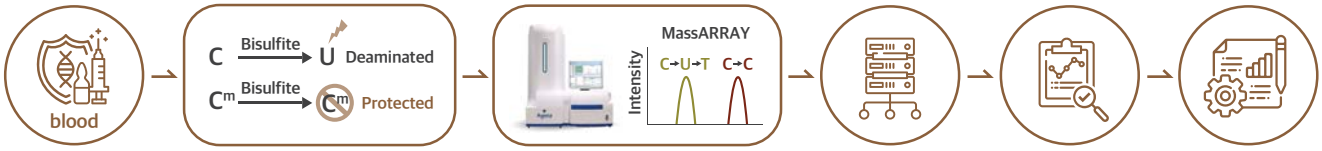
That's why measuring our biological age through epigenetic analysis can show a mixture of both our genes and the environment.

Epigenetics & Epi-Clock

There are three types of epigenetics. Epi-Clock focuses on analyzing a specific epigenetic process called DNA methylation.

DNA methylation is when specific chemical groups attach to DNA. When DNA is methylated, it stops certain genes from working, and when it's demethylated, genes become active. If genes that speed up aging get become methylated, it slows down aging, and if genes that slow aging get become methylated, it accelerates aging.

While some DNA methylation is present from birth, it can also change due to environmental factors. Therefore, maintaining a healthy lifestyle might help prevent epigenetic changes that promote aging. Monitoring methylation changes through periodic Epi-Clock testing, may help to manage aging.



Indicators used by Epi-Clock

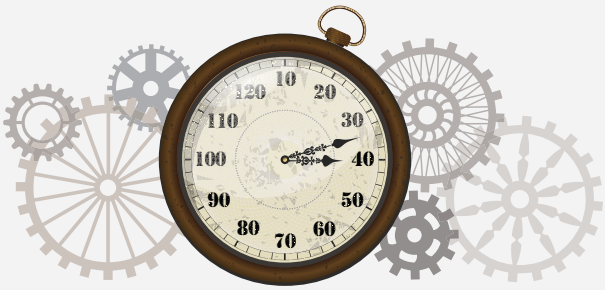
gene name	Methylation levels in aging	my DNA methylation level
ASPA	Low	High
Chr. 16	Low	High
COL1A1	Low	High
LDB2	Low	Low
MIR29B2CHG	Low	Low
SLC12A5	High	High
SST	High	High
FHL2	High	Low

- Epi-Clock looks at the methylation levels of various indicators throughout the aging process.
- Indicators such as ASPA, Chr. 16, COL1A1, LDB2, and MIR2982CHG tend to show a decrease in methylation as age increases. Consequently, low methylation levels of these genes are analyzed as a potential risk factor for aging.
- On the other hand, FHL2, SLC12A5, and SST exhibit an increasing methylation trend with age. Thus, a high level of methylation in these genes is associated with the risk of aging.
- The analysis is performed by genes, and you can determine the methylation status of your Epi-Clock indicators based on your DNA methylation levels. Indicators with identified risk factors are highlighted in red.
- Your DNA methylation levels are compared against the average values in the database established by EDGC.

What about Epi-Clock?

Measurement of biological age

Discover your biological age by examining the methylation levels of eight aging indicators. Epigenetically, chronological age is a forecasted biological age determined by a person's gene expressions associated with aging, including DNA methylation, histone modification, and micro RNA activity. This predicted age may vary from the actual age.



_____'s biological age	_____'s real age	_____'s biological age appears to be
35 years old	40 years old	5 years younger

Keep your biological age low by sticking to your current lifestyle habits!

By examining the methylation levels of aging markers for each body part

you can check the biological age of each part in four areas, including cancer risk, metabolic health, brain health, bone and muscle health.