GENETIC DIVERSITY OF A POPULATION



Reference : PTCTEST



Books of 100 PTC strips and control

A fun PW!

Cognitive objectives:

Perform a simple genetic test on the perception of taste illustrating the very wide genetic diversity existing within the same population.

Proposed activity:

In 1931 the chemist Arthur L. Fox discovers that the molecule PhenylThioCarbamide (PTC), has a very bitter taste for some people, but no taste for others, including himself. We suggest you experiment on this discovery with the help of strips impregnated with PTC and control strips. The strips are applied to the tongue and each person's sensations are recorded and compared.

Composition:

- 1 pack of 100 control strips
- 1 pack of 100 PTC strips
 Technical and educational instructions available on our website.

Conservation: 6 months at room temperature

Evolutionary aspect:

The PAV allele responsible for PTC sensitivity is considered to be the ancestral allele in the human species: the same three amino acids (Proline, Alanine, Valine) are found at the same homologous



gene positions in chimpanzees, gorillas, orangutans, and some families of gibbons, macaques and baboons.

Using the sequences of these known genes, it is possible to compare them in Phylogen to build a phylogenetic tree.