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Specialized cell lines for antibody discovery process in New Zealand White rabbit

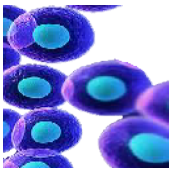
The group of **Cell Physiology & Cellular Engineering** developed a set of New Zealand White rabbit cell lines that can be used as **a syngeneic system** for **cell immunization in rabbit**. The novel rabbit cell lines were isolated from **different organs** to form a collection of cells with **diverse characteristics** and **protein expression capabilities**

A collection of cell lines with a broad range of characteristics

Pancreas
Lungs
Kidney
Adrenal gland
Bone Marrow

Cell cultivation

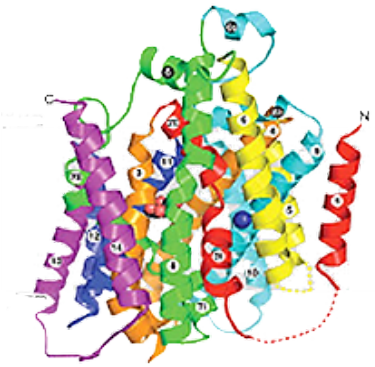
Immortalization



Specialized rabbit cell lines

Example: Overexpression of the human sodium/glucose cotrans-porter 2 (hSGLT2) in the novel rabbit cell line "Kd#14/A5"

SGLT2 is a **complex** multipass integral **membrane protein**



After **genetic manipulation**, Kd#14/A5 expresses hSGLT2 at the cell surface (see fig.) and can be used to generate **anti-hSGLT2 immunoglobulins** in rabbit

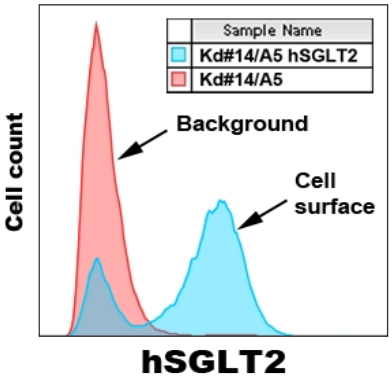


Fig: Flow cytometry hSGLT2 cell surface staining

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