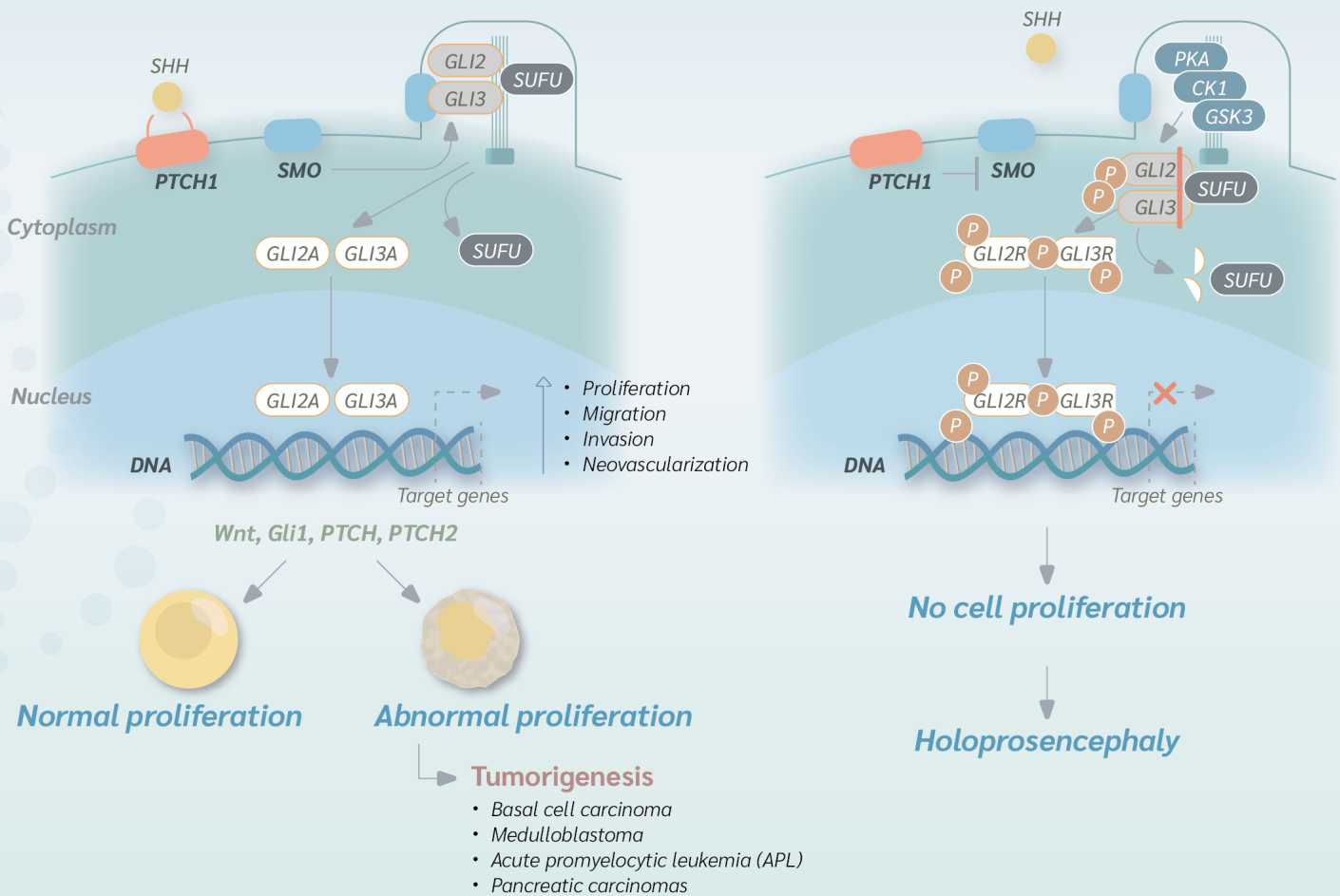


A DOUBLE-FACED PROTEIN: THE SONIC HEDGEHOG PROTEIN

IN EMBRYONIC GROWTH AND CANCER DEVELOPMENT

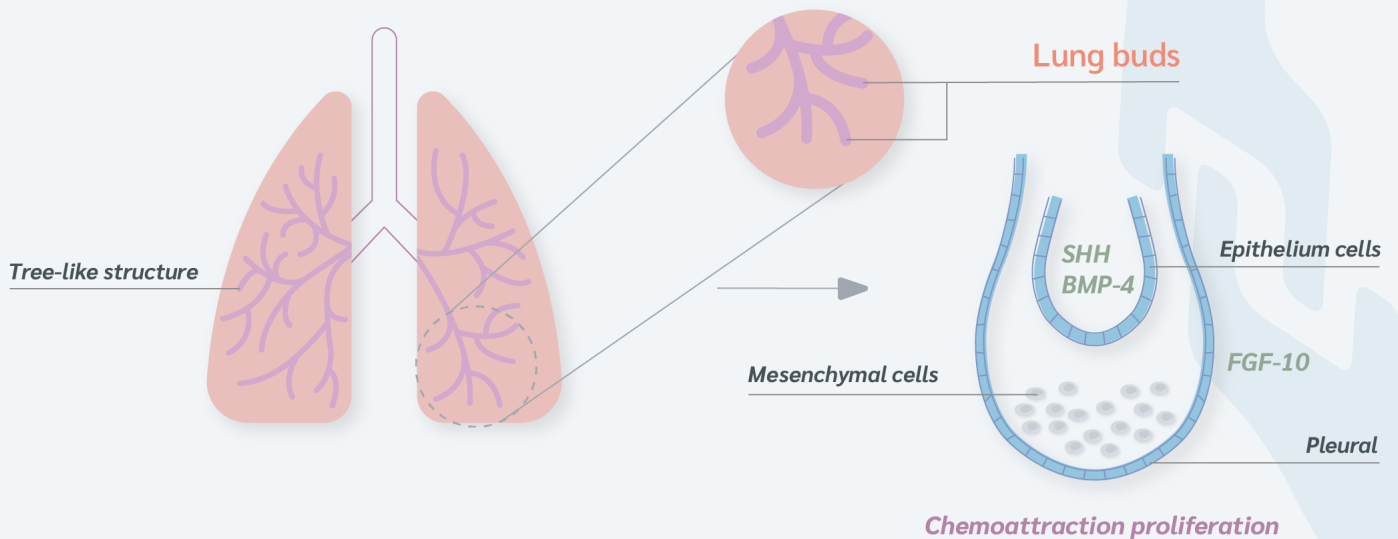
Human Recombinant Sonic Hedgehog (Shh) is a member of a tiny group of secreted proteins and the most well-known function is crucial for embryonic development, including cell differentiation, proliferation, and selection of T cells. In fact, there are three unique ligands, Sonic Hedgehog (Shh), Indian hedgehog, and Desert hedgehog, which can trigger the hedgehog(HH) pathway in mammals. One of the intricate signaling pathways that regulates or controls the process of cellular development is the Sonic Hedgehog pathway.



| Cat. | Product | Cat. | Product |
|--------|--|--------|---------------|
| C01181 | Human Sonic Hedgehog (C24II), His-SUMO Tag | C01012 | IL-10, Human |
| C01183 | Human Sonic Hedgehog (C24II), Tag Free, HEK293 | C01008 | IL-6, Human |
| C01064 | BMP-4, Human | C01088 | TGFβ-1, Human |
| C01100 | FGF-10, Human | | |

Organ development - Lung

The hedgehog is an important morphogen that controls a variety of cellular functions. It can elicit tissue-specific reactions that eventually aid in the development of a fully developed organism. The tree-like structure of human lung, which is formed by repeated tip splitting, is known as branching morphogenesis.



Cancer development

The Shh signaling affects the immunological microenvironment of both malignant and non-malignant tissues in a variety of intricate and interesting ways.

