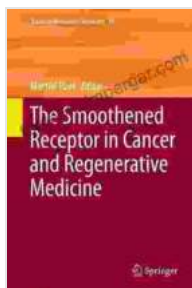


The Smoothened Receptor: A Key Player in Cancer and Regenerative Medicine

The Smoothened receptor (SMO) is a key player in the Hedgehog signaling pathway, which is involved in a wide range of developmental processes and diseases. In recent years, SMO has emerged as an important therapeutic target for cancer and regenerative medicine.

SMO in Cancer

SMO is overexpressed in a variety of cancers, including basal cell carcinoma, medulloblastoma, and lung cancer. SMO overexpression leads to constitutive activation of the Hedgehog pathway, which promotes tumor growth and survival.



The Smoothened Receptor in Cancer and Regenerative Medicine (Topics in Medicinal Chemistry, 16)

by Jacques Boucharlat

★★★★★ 5 out of 5

Language : English
File size : 15341 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Word Wise : Enabled
Print length : 557 pages



Several SMO inhibitors have been developed and are currently in clinical trials for the treatment of cancer. These inhibitors have shown promising

results in preclinical models and early clinical trials.

SMO in Regenerative Medicine

SMO is also involved in tissue regeneration. SMO activation promotes the growth and differentiation of stem cells, which can be used to repair damaged tissues and organs.

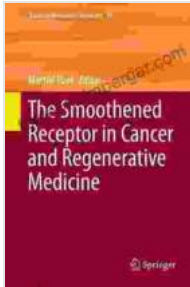
SMO inhibitors have been shown to inhibit tissue regeneration in animal models. This suggests that SMO inhibitors could be used to prevent or treat diseases that involve excessive tissue growth, such as fibrosis and scarring.

SMO is a key player in both cancer and regenerative medicine. SMO inhibitors have the potential to be effective treatments for a variety of diseases. Further research is needed to investigate the role of SMO in these diseases and to develop new SMO inhibitors.

References

1. Taipale, J., & Beachy, P. A. (2009). The Hedgehog and Wnt signalling pathways in cancer. *Nature Reviews Cancer*, 9(11),648-662.
2. Merchant, A. A., & Matsui, W. (2010). Targeting Hedgehog signalling in cancer. *Nature Reviews Drug Discovery*, 9(12),937-951.
3. Lai, A., & Yang, X. (2011). The Smoothed receptor: A novel therapeutic target for cancer. *Clinical Cancer Research*, 17(21),6679-6685.
4. Stecca, B., & Ruiz i Altaba, A. (2011). Targeting the Hedgehog pathway in cancer and regenerative medicine. *Genes & Cancer*, 2(5),440-451.

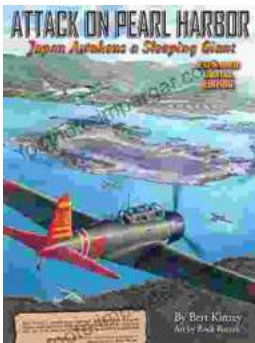
The Smoothed Receptor in Cancer and Regenerative Medicine (Topics in Medicinal Chemistry, 16)



by Jacques Boucharlat

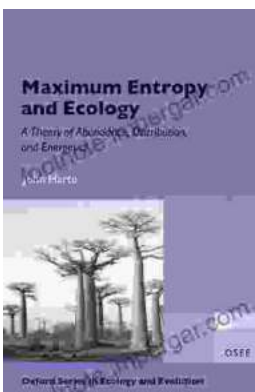
★★★★★ 5 out of 5

Language : English
File size : 15341 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Word Wise : Enabled
Print length : 557 pages



Pearl Harbor: The Day That Changed World History

On December 7, 1941, Japan launched a surprise attack on the United States naval base at Pearl Harbor in Honolulu, Hawaii. The attack resulted in...



Unveiling the Secrets of Abundance Distribution and Energetics in Ecology and Evolution

The ****Theory of Abundance Distribution and Energetics**** is a groundbreaking framework that revolutionizes our understanding of...