# Article information:

Fibroblastic SMOC2 Suppresses Mechanical Nociception by Inhibiting Coupled Activation of Primary Sensory Neurons - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9121839/>

# Article summary:

1. Fibroblastic SMOC2 is secreted by fibroblasts to become a component of the basement membrane and envelop DRG neurons and attached satellite glial cells.

2. Knockout of Smoc2 in mice leads to increased neuronal clusters and decreased mechanical threshold, but unchanged noxious thermal response.

3. SMOC2 interacts with P2X7 receptor (P2X7R) and suppresses ATP-induced activation in HEK293 cells expressing this receptor, suggesting that it plays an important role in nociceptive regulation.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article provides a detailed analysis of the role of fibroblastic SMOC2 in suppressing mechanical nociception through inhibiting the communication of adjacent DRG neurons. The authors provide evidence from experiments conducted on both mice and human cell lines, as well as from single-cell RNA sequencing data, to support their claims. The article is well written and organized, making it easy to follow the authors’ arguments.

The trustworthiness and reliability of the article can be assessed by looking at its potential biases and sources, one-sided reporting, unsupported claims, missing points of consideration, missing evidence for the claims made, unexplored counterarguments, promotional content, partiality, whether possible risks are noted or not presenting both sides equally. In this regard, there does not appear to be any bias or one-sided reporting in the article; all relevant evidence is presented objectively without any attempt to promote a particular point of view or agenda. Furthermore, all claims are supported by evidence from experiments conducted on both mice and human cell lines as well as from single-cell RNA sequencing data. Additionally, all possible risks associated with the experiments are noted throughout the article. Finally, both sides of the argument are presented equally without any attempt to favor one side over another.

In conclusion, this article is reliable and trustworthy due to its objective presentation of evidence without any bias or one-sided reporting; all claims are supported by relevant evidence; all possible risks associated with experiments are noted; and both sides of the argument are presented equally without favoring one side over another.

# Topics for further research:

* Fibroblastic SMOC2 role in pain
* Mechanisms of nociception
* DRG neuron communication
* Mouse and human cell line experiments
* Single-cell RNA sequencing
* Suppression of mechanical nociception

# Report location:

<https://www.fullpicture.app/item/fff79f198c9d07c9a1e5c9be6cae7798>