# Article information:

Molecular determinants for the chemical activation of the warmth-sensitive TRPV3 channel by the natural monoterpenoid carvacrol - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8920929/>

# Article summary:

1. TRPV3 is a nonselective calcium-permeable cation channel activated by warm temperature, voltage, and certain chemicals, and is involved in various physiological and pathological functions.

2. Carvacrol, a natural monoterpenoid from plant oregano, specifically activates TRPV3 channel by targeting the channel S2-S3 linker.

3. Leu508 is the most critical residue within the binding pocket consisting of four residues (Ile505, Leu508, Arg509, and Asp512) for the activation of TRPV3 by carvacrol but not 2-APB. Carvacrol can function as a molecular tool in designing novel specific TRPV3 modulators for further understanding of TRPV3 channel pharmacology.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

作为一篇科学研究论文，该文章并没有明显的偏见或宣传内容。然而，需要注意的是，该文章只探讨了单一分子对TRPV3通道的激活作用，并未考虑其他可能存在的影响因素。此外，该文章也没有探讨任何潜在的风险或负面影响。

另外，该文章提供了详细的实验结果和数据分析，但仍有一些缺失的考虑点。例如，在描述TRPV3通道在生理和病理过程中的作用时，作者只提到了其正面作用，并未探讨其可能存在的负面影响。此外，在描述carvacrol对TRPV3通道激活机制时，作者也未考虑其他可能存在的影响因素。

总之，尽管该文章提供了有价值的实验结果和数据分析，但仍需要更全面地考虑相关问题，并注意到可能存在的风险和负面影响。

# Topics for further research:

* Other potential factors affecting TRPV3 channel activation
* Potential risks or negative effects not explored
* Negative effects of TRPV3 channel in physiological and pathological processes
* Other potential factors affecting carvacrol's activation of TRPV3 channel
* Need for more comprehensive consideration of relevant issues
* Awareness of potential risks and negative effects.

# Report location:

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