# Article information:

Is FAM19A5 an adipokine? Peripheral FAM19A5 in wild-type, FAM19A5 knock-out, and LacZ knock-in mice | bioRxiv  
<https://www.biorxiv.org/content/10.1101/2020.02.19.955351v1.full-text>

# Article summary:

1. FAM19A5 is a secretory protein primarily expressed in the brain, but has recently been reported to be an adipocyte-derived adipokine that regulates vascular smooth muscle function.

2. This study investigated FAM19A5 transcript and protein levels in peripheral tissues, including adipose tissues from wild-type, FAM19A5 knock-out, and LacZ knock-in mice.

3. Results showed that FAM19A5 protein did not interact with the S1PR2 receptor for G-protein-mediated signal transduction, β-arrestin recruitment, and ligand-mediated internalization.

# 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:

This article provides a comprehensive overview of the current understanding of FAM19A5 expression in peripheral tissues and its potential role as an adipokine. The authors have conducted a thorough investigation into the expression of FAM19A5 transcripts and proteins in various peripheral tissues from wild type, FAM19A5 knock out, and LacZ knock in mice. The results of this study provide compelling evidence to further investigate the function of FAM19A5 in peripheral tissues under pathological conditions such as metabolic diseases or tumorigenesis.

The article is generally reliable and trustworthy; however there are some points that could be improved upon. For example, while the authors have discussed the potential role of FAM19A5 as an adipokine, they do not explore any possible counterarguments or alternative explanations for their findings. Additionally, while they discuss the potential implications of their findings for metabolic diseases or tumorigenesis, they do not provide any evidence to support these claims or discuss any possible risks associated with these implications. Furthermore, while they discuss the expression patterns of FAM19A5 during embryogenesis and in adult brains, they do not provide any information on how these patterns may differ between different species or how these patterns may change over time due to environmental factors such as diet or lifestyle choices. Finally, while they discuss the potential interactions between FAM19A5 and other proteins such as S1PR2 receptor for G-protein mediated signal transduction or β arrestin recruitment, they do not explore any other possible interactions that may exist between these proteins which could potentially affect their findings.

In conclusion, this article provides a comprehensive overview of current understanding regarding FAM19A5 expression in peripheral tissues; however there are some areas where more research is needed before definitive conclusions can be drawn about its role as an adipokine or its implications for metabolic diseases or tumorigenesis.

# Topics for further research:

* FAM19A5 expression in different species
* Role of FAM19A5 in metabolic diseases
* Effects of environmental factors on FAM19A5 expression
* Interactions between FAM19A5 and other proteins
* Potential risks associated with FAM19A5 implications
* Implications of FAM19A5 expression in tumorigenesis

# Report location:

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