# Article information:

Critical roles of FAM134B in ER-phagy and diseases | Cell Death & Disease
<https://www.nature.com/articles/s41419-020-03195-1>

# Article summary:

1. FAM134B is an important ER-phagy receptor that regulates ER-phagy and participates in many ER-phagy-related processes, such as hepatic ER-phagy, quality control of procollagens, and preadipocyte differentiation.

2. Dysfunction of FAM134B has been reported to be involved in many diseases, including neuropathy, viral infection, vascular disease, inflammation, and cancer.

3. FAM134B plays dual roles in cancer either as an oncogene or as a tumor suppressor and might directly regulate cancer cell apoptosis through acting as an ER-phagy receptor.

# 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:

The article "Critical roles of FAM134B in ER-phagy and diseases" provides a comprehensive overview of the structure, function, and role of FAM134B in various biological processes and diseases. The article is well-researched and provides valuable insights into the current understanding of FAM134B.

However, there are some potential biases and limitations to consider. Firstly, the article focuses primarily on the positive aspects of FAM134B's functions, such as its role in maintaining ER homeostasis and regulating ER-phagy. While these are undoubtedly important functions, it would be useful to also explore any potential negative effects or risks associated with FAM134B's actions.

Additionally, the article does not fully explore some open questions regarding FAM134B's functions. For example, it is unclear whether FAM134B participates in autophagy only as an ER-phagy receptor or if it is involved in the formation of ER-derived phagophore. Further research may be needed to fully understand these processes.

Furthermore, while the article briefly mentions that FAM134B plays dual roles in cancer as both an oncogene and a tumor suppressor, it does not provide a thorough analysis of this topic. It would be useful to explore why FAM134B has opposing effects in different cancer types and how this may impact treatment strategies.

Overall, while the article provides valuable insights into the role of FAM134B in various biological processes and diseases, there are some potential biases and limitations to consider. Further research may be needed to fully understand the complexities of FAM134B's functions.

# Topics for further research:

* Negative effects of FAM134B's functions
* Risks associated with FAM134B's actions
* FAM134B's involvement in the formation of ER-derived phagophore
* Dual roles of FAM134B in cancer
* Opposing effects of FAM134B in different cancer types
* Treatment strategies for cancer based on FAM134B's effects

# Report location:

<https://www.fullpicture.app/item/3a3ba7e9ec12dea07aaf87213a952d75>