# Article information:

Six distinct NFκB signaling codons convey discrete information to distinguish stimuli and enable appropriate macrophage responses - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8184127/>

# Article summary:

1. Macrophages initiate inflammatory responses via the transcription factor NFκB.

2. An information-theoretic workflow identified six dynamical features—termed signaling codons—that convey stimulus information to the nucleus.

3. Signal confusion based on defective codon deployment may underlie the etiology of some inflammatory diseases.

# 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:

The article is generally reliable and trustworthy, as it is published in a reputable journal and cites relevant research studies to support its claims. The authors provide evidence for their claims, such as the use of an mVenus-RelA reporter mouse line to enable high-throughput live-cell analysis of primary macrophages responding to host- and pathogen-derived stimuli, and single-cell imaging and RNA sequencing of macrophages from a mouse model of Sjögren’s syndrome. The article does not appear to be biased or one-sided, as it presents both sides of the argument equally and provides evidence for each side. It also does not appear to contain any promotional content or partiality towards any particular viewpoint. Furthermore, possible risks are noted in the article, such as signal confusion based on defective codon deployment potentially underlying the etiology of some inflammatory diseases.

The only potential issue with this article is that it does not explore counterarguments or present any missing points of consideration that could challenge its claims. However, this does not detract from its overall reliability and trustworthiness.

# Topics for further research:

* Inflammatory diseases etiology
* Macrophage single-cell imaging
* Macrophage RNA sequencing
* Host-pathogen interactions
* Signal confusion in inflammatory diseases
* Sjögren’s syndrome mouse model

# Report location:

<https://www.fullpicture.app/item/18dc8a68aaee864c21119ca95dfb23fe>