New drug target for inflammatory disease is all the RAGE

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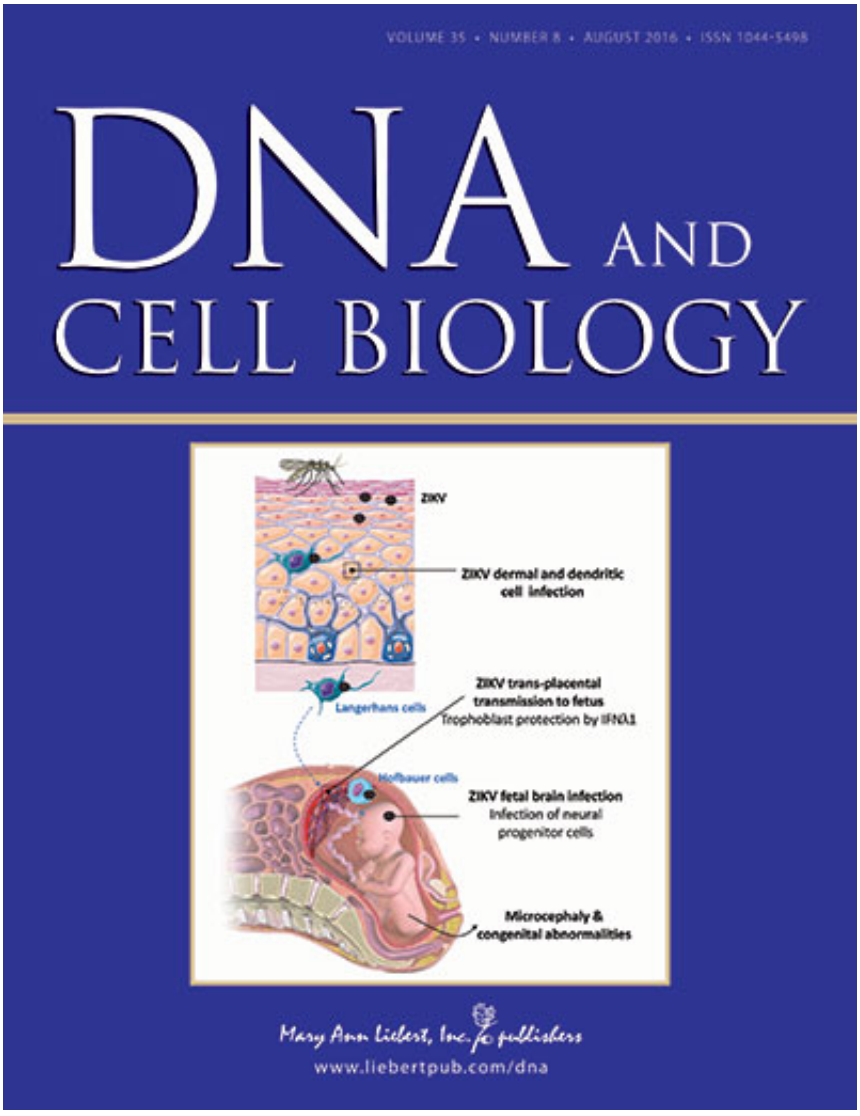

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Researchers have shown that Receptor for Advanced Glycation End Products (RAGE) helps to regulate a key signaling pathway known to promote both acute and chronic inflammation. The development of therapeutic drugs targeted to RAGE could be used to treat a range of inflammatory diseases such as asthma, infection, atherosclerosis, and arthritis, as described in an article in *DNA and Cell Biology*.

In "Receptor for Advanced Glycation End Products (RAGE) Regulates Leukotriene B4 Receptor 1 Signaling," authors Takako Ichiki Tomoaki Koga, and Takehiko Yokomizo, Juntendo University School of Medicine, Tokyo, and Kumamoto University, Kumamoto, Japan, report how they observed that RAGE binds to the leukotriene B4 receptor 1 (BLT1) receptor. This interaction between RAGE and BLT1 modifies LTB4-BLT1 signaling, which modulates the inflammatory response through its effects on cell migration.

"RAGE is an alarmin, a molecule that alerts the host of potential risks and challenges. It is induced in inflammatory conditions or diseases and promotes more inflammation," says Carol Shoshkes Reiss, PhD, Editor-in-Chief, of *DNA and Cell Biology* and Professor, Departments of Biology and Neural Science, and Global Public Health at New York University, NY. "By developing new drugs to block the interaction of RAGE with its receptor, in the future, there may be treatments of some aspects of these diseases."

More information: Takako Ichiki et al, Receptor for Advanced Glycation End Products Regulates Leukotriene BReceptor 1 Signaling, *DNA and Cell Biology* (2016). DOI: 10.1089/dna.2016.3552

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