

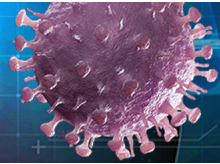


The Most Comprehensive Portfolio
of SARS-CoV-2 Reagents

- Recombinant Antibodies
- Sandwich ELISA Pairs
- Recombinant Proteins
- FFPE Cell Pellet Blocks

LEARN MORE

<https://www.genetex.com/covid19>



Response to Comment on "Cutting Edge: Inhibition of NF- κ B-Mediated TSLP Expression by Retinoid X Receptor"

This information is current as
of October 20, 2020.

Steven F. Ziegler

J Immunol 2009; 182:3; ;
doi: 10.4049/jimmunol.182.1.3
<http://www.jimmunol.org/content/182/1/3.2>

References This article **cites 1 articles**, 1 of which you can access for free at:
<http://www.jimmunol.org/content/182/1/3.2.full#ref-list-1>

Why *The JI*? [Submit online.](#)

- **Rapid Reviews! 30 days*** from submission to initial decision
- **No Triage!** Every submission reviewed by practicing scientists
- **Fast Publication!** 4 weeks from acceptance to publication

**average*

Subscription Information about subscribing to *The Journal of Immunology* is online at:
<http://jimmunol.org/subscription>

Permissions Submit copyright permission requests at:
<http://www.aai.org/About/Publications/JI/copyright.html>

Email Alerts Receive free email-alerts when new articles cite this article. Sign up at:
<http://jimmunol.org/alerts>

The Journal of Immunology is published twice each month by
The American Association of Immunologists, Inc.,
1451 Rockville Pike, Suite 650, Rockville, MD 20852
Copyright © 2009 by The American Association of
Immunologists, Inc. All rights reserved.
Print ISSN: 0022-1767 Online ISSN: 1550-6606.



Comment on “Cutting Edge: Inhibition of NF- κ B-Mediated TSLP Expression by Retinoid X Receptor”

The article published by Lee et al. in the October 15, 2008 issue of *The Journal of Immunology* (1) presents a series of experiments demonstrating the importance of the retinoid X receptor (RXR) on the inhibition of TSLP gene expression. Lee et al. (1) postulate that “RXR agonists may be useful as a therapeutic modality in treating allergy.”

The main problem is that Lee et al. (1) did not use a selective RXR ligand that can prove their hypothesis. The used derivative was the potential endogenous RXR ligand 9-*cis*-retinoic acid (9CRA), which also obtains strong retinoic acid receptor (RAR) activating potential (2) as well as strong activation potential for various other nuclear receptor heterodimers (reviewed in Ref. 3). Additionally, our group could not confirm the found effects of the “RXR agonist” by Lee et al. (1) in epithelial cells in vitro. In contrast, we used selective synthetic RXR or RAR agonists in mice for NF- κ B and TSLP gene expression analysis in the skin, obtaining an opposite outcome (J. Gericke, A. Gamlieli, J. Mihaly, K. Weiss, and R. Rühl, manuscript in preparation). We postulate that the described effects of 9CRA possibly act via RAR-mediated pathways or via other still unknown mechanisms.

The described results in Lee et al. (1) indicating that RXR ligands inhibit NF- κ B signaling and TSLP expression as well as the hypothesis that RXR ligands might be useful in treating allergy might not be correct and have not been proven in this study.

Janine Gericke, Anat Gamlieli, Kathrin Weiss, and Ralph Rühl

Department of Biochemistry and Molecular Biology
Medical and Health Science Center
University of Debrecen
Debrecen, Hungary

References

1. Lee, H.-C., M. B. Headley, M. Iseki, K. Ikuta, and S. F. Ziegler. 2008. Cutting edge: inhibition of NF- κ B-mediated TSLP expression by retinoid X receptor. *J. Immunol.* 181: 5189–5193.

2. Allenby, G., M. T. Saunders, M. Saunders, S. Kazmer, J. Speck, M. Rosenberger, A. Lovey, P. Kastner, J. F. Grippo, P. Chambon, et al. 1993. Retinoic acid receptors and retinoid X receptors: interactions with endogenous retinoic acids. *Proc. Natl. Acad. Sci. USA* 90: 30–34.
3. Desvergne, B. 2007. RXR: from partnership to leadership in metabolic regulations. *Vitam. Horm.* 75: 1–32.

Response to Comment on “Cutting Edge: Inhibition of NF- κ B-Mediated TSLP Expression by Retinoid X Receptor”

I am writing in response to a letter from Gericke et al. commenting on our paper recently published in *The Journal of Immunology*. In that paper we showed that 9-*cis*-retinoic acid was capable of inhibiting the NF- κ B-mediated induction of TSLP gene expression. The main point of the paper was that this inhibition, which had been first postulated by Li et al. (1), was actually an indirect effect on the activation of NF- κ B, and not a direct effect on the TSLP promoter. Gericke et al. in their letter refer to data in a manuscript in preparation, which we have not seen, and therefore cannot comment on, that the data are suspect because we did not use RXR- or RAR-selective agonists. They also state that they could replicate our observations, although no details were provided as to the experiments they performed. While we agree that our studies would have benefited from selective agonists (we have recently shown that all-*trans* retinoic acid can also inhibit NF- κ B-mediated TSLP gene expression), this point does not detract in any respect from the general conclusion of the paper: that the effect of these agonists on TSLP gene expression is indirect through inhibition of NF κ B activation.

Steven F. Ziegler

Immunology Program
Benaroya Research Institute
Seattle, WA 98101

Department of Immunology
University of Washington School of Medicine
Seattle, WA 98195

References

1. Li, M., N. Messaddeq, M. Teletin, J. L. Pasquali, D. Metzger, and P. Chambon. 2005. Retinoid X receptor ablation in adult mouse keratinocytes generates an atopic dermatitis triggered by thymic stromal lymphopoietin. *Proc. Natl. Acad. Sci. USA* 102: 14795–14800.

Copyright © 2008 by The American Association of Immunologists, Inc. 0022-1767/08/\$2.00