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## LACK OF SPECIFICITY OF COMMERCIAL ANTIBODIES LEADS TO MISIDENTIFICATION OF ANGIOTENSIN TYPE 1 RECEPTOR (AT<sub>1</sub>R) PROTEIN

Marcela Herrera<sup>1</sup>, Matthew A. Sparks<sup>1</sup>, Adolfo R. Alfonso-Pecchio<sup>2</sup>, Lisa M. Harrison-Bernard<sup>3</sup>, and Thomas M Coffman<sup>1</sup>

<sup>1</sup>Division of Nephrology, Department of Medicine, Duke University Medical Center, Durham NC 27710, USA

<sup>2</sup>Department of Infectious Diseases, St Jude Children's Research Hospital, 262 Danny Thomas Place, Memphis, TN 38105, USA

<sup>3</sup>Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA USA

### Dear Editor

We read with great interest the letter from Eguchi et al. providing additional evidence to support the lack of suitability of commercial antibodies for detecting angiotensin type 1 (AT<sub>1</sub>) receptor protein in experimental systems. The data from Eguchi and associates extend our previous report<sup>1</sup> by documenting the failure of two additional antibodies to specifically detect rat AT<sub>1</sub> receptor protein in Western blots of protein isolated from cells transfected with rat AT<sub>1</sub> receptors fused with a hemagglutinin tag. Including Eguchi's letter and our paper, there are now independent publications from four different laboratories demonstrating lack of specificity of 7 commonly-used anti-AT<sub>1</sub> receptor antibodies available from reputable commercial sources<sup>1-3</sup> (Table 1). Indeed, it is notable that none of the antibodies tested have demonstrated specificity for AT<sub>1</sub> receptor protein. Thus, it is incumbent upon investigators to verify the specificity and suitability of anti-AT<sub>1</sub> receptor antibodies for their particular experimental application. Reviewers and journals should likewise require such verification.

Sincerely yours,

### References

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**Table 1**Commercial antibodies shown to be unreliable for detecting AT<sub>1</sub>R protein.

Antibody source	Species of AT <sub>1</sub> R used for testing	Reference
<b>Abcam ab9391</b>	rat	<i>Eguchi et al.</i>
	rat	<i>Benicky et al.</i>
<b>Abcam ab15552</b>	mouse and rat	<i>Benicky et al.</i>
<b>Abcam ab18801</b>	mouse	<i>Herrera et al.</i>
	mouse	<i>Rateri et al.</i>
	rat	<i>Benicky et al.</i>
<b>Alomone AAR-011</b>	mouse	<i>Herrera et al.</i>
	mouse	<i>Benicky et al.</i>
<b>Santa Cruz sc-579</b>	rat	<i>Eguchi et al.</i>
	mouse	<i>Rateri et al.</i>
	mouse and rat	<i>Benicky et al.</i>
<b>Santa Cruz sc-1173</b>	rat	<i>Eguchi et al.</i>
	mouse	<i>Herrera et al.</i>
	mouse	<i>Rateri et al.</i>
	mouse and rat	<i>Benicky et al.</i>
<b>Santa Cruz sc-31181</b>	mouse	<i>Rateri et al.</i>