

Quantification of functional selectivity at the human  $\alpha_{1A}$ -adrenoceptor

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Table and legend on next page.

SUPPLEMENTAL TABLE 1. Statistical significance of signaling bias at the  $\alpha_{1A}$ -AR.

AGONIST	logTR [Ca <sup>2+</sup> ] (n=6)	logTR [cAMP] (n=5)	logTR [ECAR] (n=4)	logTR [cAMP–Ca <sup>2+</sup> ] <sup>b</sup>	logTR [ECAR–cAMP]	logTR [ECAR–Ca <sup>2+</sup> ]
Norepinephrine	8.46 ± 0.14	5.48 ± 0.11	7.48 ± 0.11	<b>-2.98 ± 0.17<sup>a</sup> (ref)</b>	<b>2.00 ± 0.15<sup>a</sup> (ref)</b>	<b>-0.98 ± 0.18<sup>a</sup> (ref)</b>
Methoxamine	7.24 ± 0.14	4.27 ± 0.13	6.87 ± 0.11	-2.97 ± 0.19 (ns)	2.60 ± 0.17 (P<0.05)	-0.38 ± 0.18 (ns)
Phenylephrine	7.94 ± 0.14	4.76 ± 0.14	8.27 ± 0.12	-3.18 ± 0.20 (ns)	3.52 ± 0.18 (P<0.001)	0.33 ± 0.18 (P<0.01)
Oxymetazoline	8.52 ± 0.15	na	8.46 ± 0.12	na	na	-0.07 ± 0.19 (P<0.05)
Cirazoline	8.57 ± 0.14	6.46 ± 0.22	8.10 ± 0.11	-2.11 ± 0.26 (P<0.05)	1.64 ± 0.25 (ns)	-0.47 ± 0.18 (ns)
A61603	9.58 ± 0.15	7.54 ± 0.12	9.03 ± 0.11	-2.05 ± 0.19 (P<0.01)	1.49 ± 0.16 (ns)	-0.56 ± 0.19 (ns)

  

AGONIST	logTR [Ca <sup>2+</sup> ] (n=9)	logTR [cAMP] (n=7)	logTR [ECAR] (n=8)	logTR [cAMP–Ca <sup>2+</sup> ] <sup>b</sup>	logTR [ECAR–cAMP]	logTR [ECAR–Ca <sup>2+</sup> ]
Norepinephrine	8.78 ± 0.09	5.59 ± 0.08	7.49 ± 0.09	<b>-3.19 ± 0.12<sup>a</sup> (ref)</b>	<b>1.90 ± 0.12<sup>a</sup> (ref)</b>	<b>-1.29 ± 0.13<sup>a</sup> (ref)</b>
Epinephrine	9.33 ± 0.08	5.78 ± 0.08	7.94 ± 0.09	-3.55 ± 0.12 (ns)	2.16 ± 0.12 (ns)	-1.39 ± 0.12 (ns)

LogTR is the log of the transduction ratio ( $\tau/K_A$ ).

<sup>a</sup>SEM for logTR[pathway 1] – logTR[pathway 2] is calculated as  $\sqrt{((SEM:\logTR[\text{pathway 1}])^2 + (SEM:\logTR[\text{pathway 2}])^2)}$ .

<sup>b</sup>LogTR[pathway 1] – logTR[pathway 2] values are the raw values for each agonist, without correction for norepinephrine.

Unpaired Student's t-tests were carried out to determine whether the logTR[pathway 1] – logTR[pathway 2] value for each agonist was significantly different from the logTR[pathway 1] – logTR[pathway 2] value for the reference agonist norepinephrine (shown in bold).

na, not applicable.