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Calcitonin and amylin receptor peptide interaction mechanisms. INSIGHTS INTO PEPTIDE-BINDING MODES AND ALLOSTERIC MODULATION OF THE CALCITONIN RECEPTOR BY RECEPTOR ACTIVITY-MODIFYING PROTEINS.

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The rAmy(8–37) Y37A and Y37P peptides used in this study were synthesized with an additional Tyr at their N termini to permit quantification by UV absorbance. Due to an oversight, we did not detail this in the original publication and compared these mutant peptides with the WT rAmy(8–37) lacking an N-terminal Tyr. We have now repeated the relevant experiments with rAmy(8–37) Y37A and Y37P peptides lacking the N-terminal Tyr addition. Concentrations of the peptides were determined by assuming 80% peptide content for the lyophilized powder. The ECD binding results in Figs. 6B and 8B were unchanged (data not shown). Unfortunately, the cell signaling assays in Fig. 9, D–F, were affected by this error, likely because a Tyr at the N terminus of rAmy(8–37) contacts the CTR 7-TM domain. The corrected Fig. 9 panels and the corresponding Table 3 pA₂ values provided below indicate that the addition of an N-terminal Tyr masked a defect of the Y37A alteration and caused the Y37P mutant to appear more potent than it is. Although our original statement that rAmy Tyr-37 is dispensable for receptor binding is incorrect, the true rAmy(8–37) Y37P peptide retained selectivity for AMY₁ over CTR, and thus our proposed allosteric mechanism for RAMP alteration of CTR selectivity is still supported by the data. The overall conclusions of the paper were not affected. We apologize for any inconvenience this error may have caused.

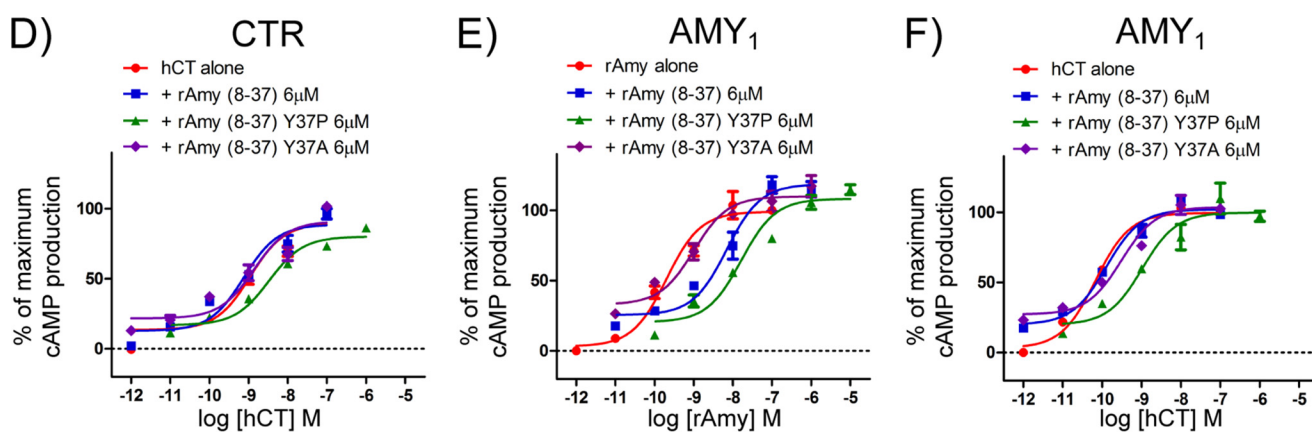


Fig. 9, D–F

TABLE 3

pA₂ of antagonists for cAMP production mediated by CTR and AMY₁ receptors

Analysis of variance with Tukey's post hoc test was used for statistical analysis.

Peptide	CTR with hCT agonist			AMY ₁ with rAmy agonist			AMY ₁ with hCT agonist		
	n	Mean	S.E.	n	Mean	S.E.	n	Mean	S.E.
rAmy(8–37)	5	<5.2		7	5.96	0.07	7	<5.4	
rAmy(8–37) Y37P	3	5.96	0.19	4	6.77 ^b	0.16	4	6.12	0.11
rAmy(8–37) Y37A	3	<5.2		4	<5.4		4	<5.4	

^b p < 0.05 compared with rAmy(8–37).

Authors are urged to introduce these corrections into any reprints they distribute. Secondary (abstract) services are urged to carry notice of these corrections as prominently as they carried the original abstracts.