

Supplementary information, Table. S5 | Effects of residue mutation in ECL1 on GLP-2R-induced cAMP accumulation by different ligands^a.

Receptor mutant	GLP-2(1-33)		GLP-1(1-31)		Chimeric GLP-1/GLP-2 (1-6)		Chimeric GLP-1/GLP-2 (7-19)		Chimeric GLP-1/GLP-2 (20-33)	
	pEC ₅₀ ±SEM	E _{max} (% WT ^b)	pEC ₅₀ ±SEM	E _{max} (% WT)	pEC ₅₀ ±SEM	E _{max} (% WT)	pEC ₅₀ ±SEM	E _{max} (% WT)	pEC ₅₀ ±SEM	E _{max} (% WT)
GLP-2R (WT)	10.8±0.04	103.0±1.6	N.D. ^c	N.D.	9.8±0.05***	102.9±1.8	8.5±0.06***	103.2±2.6	9.9±0.04***	103.8±1.5
GLP-1R (WT)	8.3±1.1*	4.0±3.1***	10.9±0.06	106.2±2.7	8.1±0.6*	7.1±3.2***	10.9±0.06	104.7±2.4	8.5±0.04*	112.1±2.8
GLP-2R R242 ^{ECL1} E	9.6±0.06	103.0±2.3	8.6±0.9	-2.2±0.9***	7.6±0.06*	108.3±3.2	7.4±0.09*	107.8±5.5	8.3±0.07	103.2±3.5
GLP-2R R242 ^{ECL1} A	9.9±0.06	103.6±2.3	N.D.	N.D.	8.1±0.07***	105.0±3.2	7.6±0.09***	106.4±4.9	8.9±0.08***	102.0±3.1
GLP-2R D244 ^{ECL1} A	10.8±0.07	101.2±2.8	N.D.	N.D.	9.6±0.06***	102.0±2.5	8.5±0.04***	102.0±1.8	9.6±0.05***	103.6±1.8
GLP-2R N247 ^{ECL1} A	11.1±0.05	102.6±1.8	N.D.	N.D.	10.4±0.05***	101.9±1.8	8.9±0.07***	102.2±2.8	10.3±0.05***	102.9±1.8
GLP-2R W249 ^{ECL1} A	7.4±0.07	113.2±4.1	8.6±0.7	-2.4±0.7	5.9±0.6	226.4±219.9	N.D.	N.D.	5.2±2.8	953.1±5657.0
GLP-2R Y252 ^{ECL1} A	10.1±0.05	102.3±2.2	9.2±3.6	-0.7±1.1***	8.2±0.07	102.8±3.1	7.3±0.08	106.4±5.1	8.4±0.05	103.7±2.1

^aAll data were fitted with a three-parameter logistic curve to obtain pEC₅₀ values. Data represent means ± S.E.M. of at least three independent experiments performed duplicate. One-way ANOVA and Dunnett's post-test were used to determine statistical difference. *P<0.05, **P<0.01, ***P<0.001.

^b WT, wild-type.