

Supplementary
Figure 1

A.

	10	20	30	40	50	
cT2r38	MLALTPVI	TVSYEVKSAFLFLSI	LEFTVGMLANAFI	FLVNFWDVV	RKQPL	50
hT2R38	MLTLTRIRTVSYEVR	RSTFLFLISVLEFAVGF	LTFNAFVFLVNFWDVV	KRQAL		50
	60	70	80	90	100	
cT2r38	SNQDLILL	SLSLTRLFLHGLLFL	DALQLTYFQRMKDPL	SLSYQTI	I MLVM	100
hT2R38	SNSDCVLL	CLSI SRLFLHGLLFL	SALQLTHFQKLESEPL	NHYSQAI	I MLVM	100
	110	120	130	140	150	
cT2r38	I	TNQVGLWLT	CLSLLYCSKI	ARFSHTLL	HCVASWWSRKVPQMLL	GAMLF
hT2R38	I	ANQANLWLAACL	SLLYCSKLI	RFSHTFL	CLASWWSRKISQMLL	GLILC
	160	170	180	190	200	
cT2r38	SCI	CTAI	CLGDFFSRSGFT	FTT	MLFVNNTEFN	LQIAKLSFYHSFI
hT2R38	SCI	CTVLCVWCF	FSRPHFT	MTT	MLFMNNTRL	NWQIKDLNLFYSFL
	210	220	230	240	250	
cT2r38	ASI	PSSLF	FLISSGVL	I	VSLGRHMRTMRAKT	KDSHDPSLEAHI
hT2R38	WSVPPF	LLFLVSSGML	T	VSLGRHMRTMKVYT	RNSRDPSLEAHI	KALKSLV
	260	270	280	290	300	
cT2r38	SF	LCLYVVSFCAAL	VSVP	LLMLWHNKI	GVM	CVGILAACPSI
hT2R38	SF	FCFFVLISSCMAFI	SVPL	LLLWRDKI	GVM	CVGIMAACPSG
	310	320	330			
cT2r38	NAKL	RAVETI	LLWQNSL	KI	GADHKADART	PGLC
hT2R38	NAKL	RAVMTI	LLWQSSL	KVRADHKADSRT	-	LC

B.

	10	20	30	40	50	
cT2r43	MVTALPSI	FSI	VVI	I	EFL	LGNFANGFI
hT2R43	M	TFLPI	I	FSS	L	VVVTFVIGNFANGFI
	60	70	80	90	100	
cT2r43	LAVSRI	GLL	WLI	LI	NWYATL	FSPDFYSL
hT2R43	LAVSR	VGLL	WLL	LI	NWYST	VLNPAFNS
	110	120	130	140	150	
cT2r43	SLSI	FYL	FKI	ANFSS	LI	FLRLKWRVKS
hT2R43	TLSI	FYL	LKI	ANFSN	FI	FLHLKRRVKS
	160	170	180	190	200	
cT2r43	EKVQT	DVYEGNGTR	KTKL	RDI	LQLSNMT	IFTLANFI
hT2R43	E	IVRTKEFEGNMT	WKIKL	KSAMYFSNMT	VTMVAN	LPFTLTL
	210	220	230	240	250	
cT2r43	SL	WKHLK	RMQL	CDKGSQDP	STKVHI	RAMQTV
hT2R43	SL	CKHLK	KMQL	HGKGSQDP	STKVHI	KALQTV
	260	270	280	290	300	
cT2r43	SSNWP	QNEFG	FLL	CQVI	GI	LYPSI
hT2R43	SF	GSE	ENKPV	FMFCKAI	RFSYPSI	HPFILI
cT2r43						
hT2R43	V	KGEKTSSP				

300
309

Supplementary Figure 1

Supplementary Figure 1. Cats encode predicted protein orthologs to human bitter taste receptors 38 and 43. Sequences of human bitter taste receptors TAS2R38 and TAS2R43 were used to identify cat genes that were predicted to encode orthologous proteins. **(A)** Alignment of predicted cat Tas2r38 (cT2r38) with human TAS2R38 (hT2R38). **(B)** Alignment of predicted cat Tas2r43 (cT2r43) with human TAS2R43 (hT2R43).