

S1 Table.

Alternative *D. melanogaster* neuropeptide GPCR CT isoforms

* This entry lists the # of BBS in the *melanogaster* GPCR/the number of BBS which are conserved in *virilis*

** alt splicing produces a longer CT but lacking any additional BBS's

**** alt splicing produces an isoform with an unspliced intron that includes a BBS; not present in *virilis*

***** alt splicing produces different CTs but neither contains a BBS

Protein Isoform (alternative CTs)	Genbank Ref. #	Exp. Variance	# BBS * (total/conserved)	# BBS-like(* total/conserved)	Figure
AKH-R					3
PA	AAF52426		1/1	1/1	
PB	AAN10595				
PC	AAS64647	alt. splicing **	1/?	1/?	
PD	AGB92685				
AstA-R1					3
PB	AAF45884.3		1/1	1/1	
PD	AAG22404				
AstA-R2					3, 23
PA	AAF56809		0/0	0/0	
PB	AFH06669	alt. splicing	1/1	0/0	
PC	AGB96422				
AstC-R1					3
PA	AAF49259.2		2/1	0/0	
AstC-R2					3
PB	AAN11677.2		1/1	0/0	
PD	AGB94708.1	<u>stop suppr.</u>	1/1	0/0	
PE	AAZ66058				
PF	ALI30485	<u>stop suppr.</u>	1/1	0/0	

CAPA R						3, 14
	PB	AAS65092.1		2/0	0/0	
	PC	AGB94868	alt. splicing	3/?		
CCAP-R						3
	PB	AAS65092.1		1/1	0/0	
	PC	AGB94868	alt. splicing			
CCHa 1 R						5
	PA	AAF57819		1/0	0/0	
CCHa2 R						5, 16
	PA	AAF57285.4		0/0	0/0	
	PB	ACZ94340	alt. splicing			
	PC	QCD26194	stop suppr.			
CCKL-R 17D1						3
	PA	ABW09450		1/1	1/1	
CCKL-R 17D3						3
	PB	AAF48879		2/1	3/3	
CG4313						9
	PC	AHN59270				
	PD	AAF45710		0/0	0/0	
	PE	AHN59271				
CG12290						9
	PA	AAF56578		2/1	1/1	
	PB	AHN57539				
CG13229						9
	PA	AAF58717		1/1	0/0	
	PB	AGB93413				
	PC	AGB93414				
CG13575						9
	PA	AAF47188		1/1	0/0	
CG13995						9
	PA	AAF52333		0/0	2/2	
CG30340						9, 21

	PA	AAM71077		0/0	0/0	
CG32547						8
	PC	AAX52506		4/4	1/1	
	PD	AGB95524				
CG33639						9, 20
	PA	AAF48813		0/?	0/?	
	PB	ADV37751				
	PC	ADV37752				
	PD	AGB95518	lt. splicing ****	0/0	0/0	
CNMa-R						5
	PA	AAF50229.3		1/1	1/0	5
Crz-R						6
	PA	AAF49928		3/3	1/1	
	PB	AGB94448	stop suppr.	3/?	1/?	
ETH-R						6
	PA	AAF55872		1/1	0/0	
	PB	AAS65191	alt. splicing	3/3	0/0	
	PC	AHN57438				
FMRFa-R						4
	PA	AAF47700		2/2	0/0	
	PB	AGB94042				
	PC	AHN57950				
Lg R1						7, 17
	PB	AAN13752				
	PA	AAF55460		0/0	0/0	
Lg R3						7
	PA	AAF56490		1/1	1/1	7
Lg R4						7
	PB	ABW09404		1/1	2/2	7
	PC	AHN59662				
Lk R						6
	PA	AAF50775.2		2/2	0/0	6

moody						8
	PA	NP_569970.2		4/2	0/0	8
	PC	NP_001188535.1	alt. splicing	1/0	0/0	
MS-R1						7
	PA	AAF47635.2		1/0	1/0	7
	PB	AGB94019	stop suppr.			
Ms-R2						7
	PA	AAF47633		1/1	0/0	7
	PB	AAN12219				
	PC	AGB94018	stop suppr.			
NPF-R						7, 18
	PA	AAF51909		1/0	0/0	
	PB	AFH06264	alt. splicing			
	PC	AFH06265				
	PD	AFH06266				
PK1-R						4
	PD	AAX52950		2/1	3/1	
	PE	AFH06407				
PK2-R1						4
	PA	AAF54930		1/1	1/1	
PK2-R2						4
	PA	AAF54929.2		3/2	1/1	
	PB	AAN13555.1				
Proc-R						7, 12
	PA	AAF45980.2				
	PB	AAN09130.1				
	PC	AAX52477.1		1/0	1/0	
	PD	AAX52478.1				
	PE	AHN59339				
rk						8
	PA	AAF53367		5/3	0/0	
Rya-R						5

	PA	AAF56655.3		1/1	1/1	
	PB	AHN57551	alt. splicing	2/2	2/2	
	PC	AHN57552	alt. splicing	0/?	0/?	
SIFa-R						6
	PA	AAN13859.2		7/7	0/0	
	PB	ACZ94970				
sNPF-R						4
	PA	AAF49074		1/1	1/1	
	PB	AGB94779				
SP-R						5
	PA	AAF46037		1/1	1/1	
	PB	AHN59364				
	PC	AHN59363				
	PD	QJC18359	stop suppr.			
Tk-R 86C						5, 13
	PA	AAF54544.1		2/0	1/1	
	PB	ABW08638	alt. splicing****	3/?	1/?	
Tk-R 99D						5
	PA	AAF56979.2		2/1	0/0	
	PB	ACZ95066				
	PC	AGB96471	stop suppr.			
Tre1						9
	PA	NP_524792.1		0/0	2/2	
Trissin-R						6
	PB	AAF52294		2/2	2/2	
	PC	AAF52292				
	PD	AGB92644	alt. splicing	3/?	3/?	
	PE	AHN54156				
Dh31-R						10
	PA	AAN16138		1/1	0/0	10
	PB	AGB93482				
	PC	AGB93483	stop suppr.	3/3	0/0	

Hector/CG4395					10, 19
	PA	AAF48216		0/0	0/0
	PB	AHN59644			
PDF-R					10, 15, 22
	PA	AAF45788		2/0	1/1
	PB	AFH07215			
	PC	AHN59297	same as PD		
	PD	AHN59298	alt. splicing	4/2	1/1
Dh44-R1					11
	PA	AAF58250		2/2	1/1
Dh44-R2					11
	PA	AAF58501		1/1	1/1
	PB	AAM68690	alt. splicing	1/1	0/0