

Table S1. Midline genes

Name	Function	Name	Function
MP1		All MP3	
<i>5-HT1A</i>	Serotonin receptor	<i>5-HT1A</i>	Serotonin receptor
<i>CG31757</i>	Phosphodiesterase	<i>Glu-R1</i>	Glutamate-gated ion channel
<i>exex</i>	Lim homeobox transcription	<i>nub</i>	POU homeobox transcription
<i>fkf</i>	Fork head transcription factor	<i>pdm2</i>	POU homeobox transcription
<i>Glu-R1</i>	Glutamate-gated ion channel	mVUM	
<i>hb</i>	Zinc finger transcription factor	<i>futsch</i>	Microtubule binding
<i>Lim3</i>	Lim homeobox transcription	<i>CG14509</i>	Unknown
<i>nub</i>	POU homeobox transcription	<i>CG31757</i>	Phosphodiesterase
<i>Pdf</i>	Neuropeptide	<i>CG33528</i>	Monoamine transporter
<i>pdm2</i>	POU homeobox transcription	<i>dgk</i>	Diacylglycerol kinase
H-cell		<i>fd59a</i>	Fork head transcription factor
<i>CG31757</i>	Phosphodiesterase	<i>Glu-R1</i>	Glutamate-gated ion channel
<i>CG33528</i>	Monoamine transporter	<i>SNF4a!</i>	Receptor serine/threonine
<i>DAT</i>	Dopamine transporter	<i>Tbh</i>	Octopamine biosynthesis
<i>Ddc</i>	Dopamine biosynthesis	<i>VGlut</i>	Vesicular glutamate transporter
<i>NPFR1</i>	Neuropeptide receptor	<i>zfh1</i>	Zinc finger transcription factor
<i>ple</i>	Tyrosine 3-monooxygenase	iVUM	
<i>SNF4a!</i>	Receptor serine/threonine kinase	<i>CG15236</i>	Unknown
<i>SoxN</i>	HMG transcription factor	<i>CG8394</i>	GABA vesicular transporter
<i>tup</i>	Lim homeobox transcription	<i>en</i>	Homeobox transcription factor
H-cell sib		<i>fkf</i>	Fork head transcription factor
<i>CG13565</i>	Unknown	<i>Gad1</i>	Glutamate decarboxylase
<i>fkf</i>	Fork head transcription factor	<i>Lim1</i>	Lim homeobox transcription
<i>Lim1</i>	Lim homeobox transcription	<i>per</i>	PAS transcription factor
<i>per</i>	PAS transcription factor	<i>sim</i>	bHLH-PAS transcription factor
<i>sim</i>	bHLH-PAS transcription factor	All VUM4,5	
<i>VGlut</i>	Vesicular glutamate transporter	<i>cas</i>	Zinc finger transcription factor
		All VUM6	
		<i>Tkr</i>	BTB/POZ domain