

Data sheets -----

YOUR NAMES Plouvan + Mans' + Naderec

CS Larvae

	W/o ATR		W/o ATR/Light
MHM			
BWM			

PPK Larvae XXL (very sensitive)

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

PPK Larvae (less sensitive)

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM	135	142	110	122 N=1
BWM	42	43	35	32 N=1

OK371 Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

GAD1 Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

D42 X UAS-eNpHR Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

OK371 Adults

W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
# cross			
½ 10 sec			

CS Adults

W/o ATR	W/o ATR/Light
# cross	
½ 10 sec	

Data sheets -----

YOUR NAMES

Amanda S. & Kaley Hoyle



CS Larvae

W/o ATR

W/o ATR/Light

MHM

BWM

PPK Larvae XXL (very sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

PPK Larvae (less sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

GAD1 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM *7*

0

||

0

N = 1

BWM *14*

0

||

0

N = 1

Holo rhodopsin

D42 X UAS-eNpHR Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Adults

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

cross

½ 10 sec

CS Adults

W/o ATR

W/o ATR/Light

cross

½ 10 sec

Data sheets -----

YOUR NAMES Sam + Sarah

CS Larvae

W/o ATR

W/o ATR/Light

MHM

BWM

PPK Larvae XXL (very sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

PPK Larvae (less sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM 10, 18, 104, 154

78, 98, 84, 76

104, 104, 116, 124

118, 90, 112, 122

BWM 42, 54, 90, 42

36, 24, 34, 26

24, 36, 46, 40

38, 30, 32, 22

OK371 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

GAD1 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

D42 X UAS-eNpHR Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Adults

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
# cross				
½ 10 sec				

CS Adults

	W/o ATR	W/o ATR/Light
# cross		
½ 10 sec		

PPK w/ ATR
16 6, 5, 6, 6, 5

w/ ATR + light
1, 1, 1, 1, 1

Data sheets -----

YOUR NAMES Matthew Malting
London SIMPSON

CS Larvae

	W/o ATR		W/o ATR/Light
MHM			
BWM			

PPK Larvae XXL (very sensitive)

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

PPK Larvae (less sensitive)

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM	58	64 48	70	30 58
BWM	60	48	49	30

OK371 Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

GAD1 Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM	96	110	88	44
BWM	42	48	60	32

D42 X UAS-eNpHR Larvae

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM				
BWM				

OK371 Adults

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
# cross				
½ 10 sec				

CS Adults

	W/o ATR	W/o ATR/Light
# cross		
½ 10 sec		

Data sheets -----

YOUR NAMES Fleet Slavi G

Co-stimulator for ChR2, needed to open cation channel, needed for proper firing
↓
W/o ATR

W/o ATR/Light

CS Larvae

MHM

BWM

PPK Larvae XXL (very sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

PPK Larvae (less sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

GAD1 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

D42 X UAS-eNpHR Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

Cholinergic type IV sensory neurons - initiates behavior VEEPI in wild type wasp larvae attacks motor neurons
encodes vesicular transporter for glutamate

GABAergic neurons (CNS, sensory neurons)

motor neurons activated by yellow light, inhibitory rather than excitatory

MHM	77	10	48	0
BWM	23	0	22	0
MHM	50 63	38 52	49 49	39 60
BWM	35 20	29 27	22 20	19 10

how many cross line in
x secs

OK371 Adults

W/o ATR
cross 8
½ 10 sec

W/ ATR
14

W/o ATR/Light
12
~~8~~
14

W/ ATR/Light
12
~~8~~
15 & 14

CS Adults

W/o ATR
cross
½ 10 sec

W/o ATR/Light

W yellow light
-ATR +ATR
15 9

Data sheets -----

YOUR NAMES Paige + Brenda
Kington Alvarez

CS Larvae

W/o ATR

W/o ATR/Light

MHM

BWM

PPK Larvae XXL (very sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

PPK Larvae (less sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

GAD1 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

D42 X UAS-eNpHR Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

Motor neurons
Glutamate vesicles
transporters
AT glutamate

GABA nerve
neurons

Positive central

30 sec

Genotype	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
MHM	22 52 44	32 42 49	40 100 62	59 68 59
BWM	72 76 64	60 80 54	10 14 6	40 5 3

Avg. 4

OK371 Adults

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

cross

½ 10 sec

CS Adults

W/o ATR

W/o ATR/Light

cross

½ 10 sec

Data sheets -----

YOUR NAMES Henry & Joey

Avg in blue

CS Larvae

W/o ATR

W/o ATR/Light

MHM

BWM

PPK Larvae XXL (very sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

PPK Larvae (less sensitive)

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

OK371 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

~~BWM~~

123	102	123	116	90	118	104	118	106	123	116	81	85	82
18	33	30	27	41	41	41	26	37	36	33	36	26	29

GAD1 Larvae

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

D42 X UAS-eNpHR Larvae

habitat adaptation

W/o ATR

W/ ATR

W/o ATR/Light

W/ ATR/Light

MHM

BWM

subject pt

OK371 Adults

	W/o ATR	W/ ATR	W/o ATR/Light	W/ ATR/Light
# cross				
1/2 10 sec				

CS Adults

	W/o ATR	W/o ATR/Light
# cross	19	20
1/2 10 sec	20	18
	20	20

PPK Adults

	W/o ATR	W/ATR	W/o ATR/Light	W/ATR/Light
# cross				7
1/2 10 sec		10		4
		11		0
		8		

Channel no loop