

Table S1. The genomic annotation of *Glossina morsitans morsitans* OR and GR genes.

<i>G. m. morsitans</i>	Scaffold	Gene region	Reciprocal BlastP search		
			NCBI acc. no.	E-value	Description
GmmOr1	scf7180000648683	14760..27560 (-)	AFH96943.1	0.00E+000	odorant receptor co-receptor [<i>Chrysomya rufifacies</i>]
GmmOr2	scf7180000648756	29714..32260 (-)	NP_525046.1	5.00E-126	odorant receptor 2a [<i>Drosophila melanogaster</i>] >sp O46077.2
GmmOr3	scf7180000648228	109437..110684 (-)	XP_002100282.1	1.80E-088	GE16253 [<i>Drosophila yakuba</i>] >gb EDX01390.1
GmmOr4	scf7180000642438	111181..112437 (+)	XP_002088410.1	7.20E-080	GE18551 [<i>Drosophila yakuba</i>] >gb EDW88122.1
GmmOr5a	scf7180000639717	1658..7954 (-)	XP_004530390.1	5.30E-070	PREDICTED: odorant receptor 33b-like [<i>Ceratitis capitata</i>]
GmmOr6	scf7180000651846	662439..668878 (-)	XP_002080251.1	5.00E-073	GD10347 [<i>Drosophila simulans</i>] >gb EDX05836.1
GmmOr7	scf7180000651846	655700..658243 (-)	XP_002080251.1	2.40E-078	GD10347 [<i>Drosophila simulans</i>] >gb EDX05836.1
GmmOr8	scf7180000651846	659294..662305 (-)	XP_001961367.1	3.50E-076	GF13833 [<i>Drosophila ananassae</i>] >gb EDV38189.1
GmmOr9	scf7180000652157	136730..138889 (-)	XP_002080251.1	1.90E-096	GD10347 [<i>Drosophila simulans</i>] >gb EDX05836.1
GmmOr10	scf7180000644232	131824..133273 (+)	XP_004526336.1	6.60E-104	PREDICTED: odorant receptor 46a, A-like [<i>Ceratitis capitata</i>]
GmmOr11	scf7180000652156	1267206..1269387 (-)	XP_004526336.1	2.20E-074	PREDICTED: odorant receptor 46a, A-like [<i>Ceratitis capitata</i>]
GmmOr12	scf7180000651831	454103..455258 (-)	XP_002098364.1	9.00E-087	GE10342 [<i>Drosophila yakuba</i>] >gb EDW98076.1
GmmOr13	scf7180000645812	24048..26362 (-)	XP_002019305.1	8.00E-117	GL12310 [<i>Drosophila persimilis</i>] >gb EDW37939.1
GmmOr14	scf7180000641298	67504..69789 (+)	XP_004534467.1	3.00E-043	PREDICTED: putative odorant receptor 45a-like [<i>Ceratitis capitata</i>]
GmmOr15	scf7180000651027	85495..88783 (+)	XP_001361066.3	1.30E-040	Or45a [<i>Drosophila p. pseudoobscura</i>] >gb EAL25642.3
GmmOr16	scf7180000649095	5203..6553 (-)	XP_004534466.1	2.20E-054	PREDICTED: putative odorant receptor 45a-like [<i>Ceratitis capitata</i>]
GmmOr17	scf7180000648564	107291..115929 (+)	XP_002135335.1	2.10E-044	odorant receptor N [<i>Drosophila p. pseudoobscura</i>] >gb EDY73962.1
GmmOr18	scf7180000648792	266134..274630 (+)	ACO83222.1	1.00E-106	putative odorant receptor [<i>Stomoxys calcitrans</i>]
GmmOr19	scf7180000648792	277481..283655 (+)	ACO83222.1	0.00E+000	putative odorant receptor [<i>Stomoxys calcitrans</i>]
GmmOr20	scf7180000652157	706731..709253 (-)	XP_004518350.1	9.90E-008	PREDICTED: putative odorant receptor 85d-like [<i>Ceratitis capitata</i>]
GmmOr21	scf7180000652170	3479799..3481562 (-)	XP_001994082.1	6.90E-037	GH22929 [<i>Drosophila grimshawi</i>] >gb EDV94818.1
GmmOr22	scf7180000641538	58384..59452 (+)	AAD26356.1	4.80E-012	odorant receptor DOR62 [<i>Drosophila melanogaster</i>]
GmmOr23	scf7180000652170	25006662..25007967 (+)	XP_002036307.1	5.00E-067	GM17404 [<i>Drosophila sechellia</i>] >gb EDW52230.1
GmmOr24	scf7180000652157	888049..890329 (-)	XP_001359521.1	3.10E-040	Or85b [<i>Drosophila p. pseudoobscura</i>] >gb EAL28667.1
GmmOr25	scf7180000649009	35111..37791 (+)	XP_002047978.1	2.50E-038	GJ11611 [<i>Drosophila virilis</i>] >gb EDW70320.1
GmmOr26	scf7180000652170	7565092..7567386 (+)	XP_004535567.1	1.00E-061	PREDICTED: putative odorant receptor 67c-like [<i>Ceratitis capitata</i>]
GmmOr27	scf7180000650866	8500..9930 (-)	XP_004535566.1	7.20E-063	PREDICTED: unknown protein LOC101461468 [<i>Ceratitis capitata</i>]
GmmOr28	scf7180000650866	2343..4333 (-)	XP_004535567.1	6.10E-014	PREDICTED: putative odorant receptor 67c-like [<i>Ceratitis capitata</i>]
GmmOr29	scf7180000652141	245471..248227 (-)	XP_004535567.1	5.70E-037	PREDICTED: putative odorant receptor 67c-like [<i>Ceratitis capitata</i>]
GmmOr30	scf7180000652141	215509..218352 (-)	XP_321153.1	1.40E-115	AGAP001912-PA [<i>Anopheles gambiae</i> str. PEST] >gb EAA01023.2
GmmOr31	scf7180000650238	26161..28277 (-)	NP_523470.3	1.00E-039	odorant receptor 24a [<i>Drosophila melanogaster</i>] >sp P81913.4
GmmOr32	scf7180000648410	219323..223133 (-)	XP_002075406.1	2.60E-073	GK17746 [<i>Drosophila willistoni</i>] >gb EDW86392.1

GmmOr33	scf7180000648614	40250..49045 (+)	NP_523721.1	3.00E-067	odorant receptor 49b [Drosophila melanogaster] >sp Q9V6H2.1
GmmOr34	scf7180000652170	23283182..23286806 (+)	CBA13932.1	5.50E-022	odorant receptor 85d [Drosophila melanogaster]
GmmOr35	scf7180000648722	141942..145983 (-)	ADK48351.1	1.30E-067	odorant receptor 43a [Drosophila melanogaster]
GmmOr36	scf7180000648722	191876..198790 (-)	XP_004534194.1	1.10E-039	PREDICTED: putative odorant receptor 30a-like [Ceratitis capitata]
GmmOr37	scf7180000648373	4213..5709 (-)	XP_004531513.1	1.90E-118	PREDICTED: putative odorant receptor 74a-like [Ceratitis capitata]
GmmOr38	scf7180000648495	88188..91340 (+)	XP_004522725.1	7.70E-097	PREDICTED: odorant receptor 47b-like [Ceratitis capitata]
GmmOr39	scf7180000648080	333109..334447 (+)	XP_004536014.1	5.10E-081	PREDICTED: putative odorant receptor 88a-like [Ceratitis capitata]
GmmOr40	scf7180000649009	40802..42730 (+)	XP_002049113.1	1.20E-075	GJ21406 [Drosophila virilis] >gb EDW60306.1
GmmOr41	scf7180000649048	4425..5787 (-)	XP_002094291.1	1.50E-074	GE21738 [Drosophila yakuba] >gb EDW94003.1
GmmOr42	scf7180000649048	15..1464 (-)	XP_002094291.1	1.30E-080	GE21738 [Drosophila yakuba] >gb EDW94003.1
GmmOr43	scf7180000651490	579..1910 (+)	XP_002094291.1	9.00E-058	GE21738 [Drosophila yakuba] >gb EDW94003.1
GmmOr44	scf7180000648928	37939..39536 (-)	XP_002069080.1	5.40E-095	GK24034 [Drosophila willistoni] >gb EDW80066.1
GmmOr45	scf7180000650705	207676..209075 (+)	ADG96063.1	3.00E-089	putative odorant receptor [Stomoxys calcitrans]
GmmOr46	scf7180000645804	155235..156578 (-)	XP_002047834.1	1.30E-084	GJ13657 [Drosophila virilis] >gb EDW70176.1
GmmGR1	scf7180000650411	214655..216066 (+)	AFH96947.1	6.00E-092	gustatory receptor 1 [Chrysomya megacephala]
GmmGR2	scf7180000652170	18996209..18997720	XP_312786.1	4.00E-039	AGAP003098-PA [Anopheles gambiae str. PEST] >gb EAA08342.2
GmmGR3	scf7180000652170	18992721..18996270	XP_312786.1	2.00E-059	AGAP003098-PA [Anopheles gambiae str. PEST] >gb EAA08342.2
GmmGR4	scf7180000650833	228463..237409 (-)	AFH96945.1	2.00E-087	gustatory receptor 2 [Chrysomya megacephala]
GmmGR5	scf7180000647997	53981..55829 (+)	XP_001354191.2	3.00E-045	Gr66a [Drosophila p. pseudoobscura] >gb EAL31243.2
GmmGR6	scf7180000652170	14942509..14944789	NP_995642.1	7.00E-058	gustatory receptor 28b, isoform C [Drosophila melanogaster]
GmmGR7	scf7180000648889	6876..8857 (+)	NP_995642.1	7.00E-038	gustatory receptor 28b, C-like [Drosophila melanogaster]
GmmGR8	scf7180000651593	207733..209113 (+)	XP_001968324.1	2.00E-027	GG24573 [Drosophila erecta] >gb EDV57383.1
GmmGR9	scf7180000652170	23328288..23329768	XP_002021945.1	5.00E-046	GL14254 [Drosophila persimilis] >gb EDW25886.1
GmmGR10	scf7180000645661	235649..237209 (+)	XP_001962923.1	1.00E-032	GF14188 [Drosophila ananassae] >gb EDV32144.1
GmmGR11	scf7180000652146	594756..597494 (-)	XP_309027.2	8.00E-024	AGAP006716-PA [Anopheles gambiae str. PEST] >gb EAA45495.2
GmmGR12	scf7180000650947	5268..6453 (+)	XP_002087574.1	6.00E-022	GE17747 [Drosophila yakuba] >gb EDW87286.1
GmmGR13	scf7180000640662	25103..26585 (+)	XP_309026.1	9.00E-024	AGAP006717-PA [Anopheles gambiae str. PEST] >gb EAA45494.1
GmmGR14	scf7180000652170	14938990..14942365	XP_002018685.1	3.00E-015	Gr28b [Drosophila p. pseudoobscura] >gb EDW36881.1

The *Glossina morsitans morsitans* annotated gene loci names, scaffold identity, gene location within the scaffold, in bracket (*) refers to the coding strand where (-), reverse and (+), forward strands; columns under reiterative blast searches gives best Diptera query orthologs for *Drosophila*, *Anopheles* and *Aedes* and their e-values