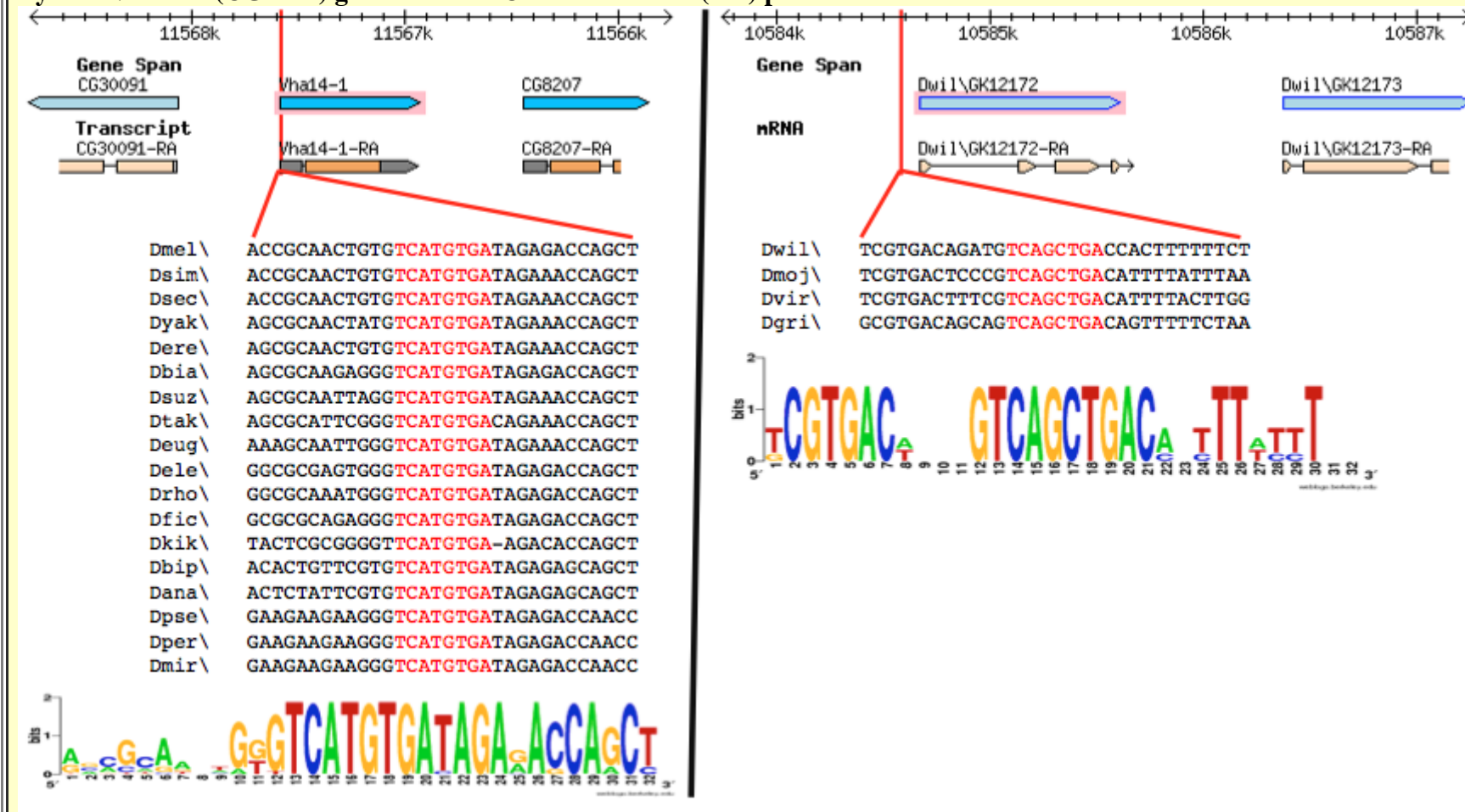


Gene Cluster ID	Atp6v1F
Drosophila melanogaster gene	Vha14-1 (CG8210)
FlyBase ID	FBgn0262512
Predicted function	ATPase, H⁺ transporting, lysosomal 14kDa, V1 subunit F
Protein size	124 amino acids
Cytogenetic map	2R:52B5-52B2
Gene sequence location	2R:11566931..11567585 [-]
Dmel CLEAR sequence	TCATGTGA
CLEAR sequence location	2R:11567581..11567588
Drosophila paralog	Vha14-2 (CG1076)

FlyBase Vha14-1 (CG8210) gene model & CLEAR element (red) positions:



Atp6v1F gene structure comparison:

Key: UTR region, CDS region

Species	Atp6v1F orthologs	5'exon	intron	exon	intron	exon	intron	exon3'	Extended CLEAR region	Position	bps from TSS	
<i>Drosophila_melanogaster</i>	Dmel\Vha14-1	98	375						182	accgcaactgtgTCATGTGAtagagaccagct	5'	-3
<i>Drosophila_simulans</i>	Dsim\GD25605	ND	375						ND	accgcaactgtgTCATGTGAtagaaccagct	5'	

<i>Drosophila_sechellia</i>	Dsec\GM20126	ND	375							ND	accgcaactgtgTCATGTGAtagaaaccagct	5'	
<i>Drosophila_yakuba</i>	Dyak\GE14140	ND	375							ND	agcgcaactatgTCATGTGAtagaaaccagct	5'	
<i>Drosophila_erecta</i>	Dere\GG22339	ND	375							ND	agcgcaactgtgTCATGTGAtagaaaccagct	5'	
<i>Drosophila_biarmipes</i>	Dbia\Vha14-1	ND	375							ND	agcgcaagagggTCATGTGAtagagaccagct	5'	
<i>Drosophila_suzukii</i>	Dsuz\Vha14-1	ND	375							ND	agcgcaattaggTCATGTGAtagaaaccagct	5'	
<i>Drosophila_takahashii</i>	Dtak\Vha14-1	ND	375							ND	agcgcatcgggTCATGTGAcagaaaccagct	5'	
<i>Drosophila_eugracilis</i>	Deug\Vha14-1	ND	375							ND	aaagcaattgggTCATGTGAtagaaaccagct	5'	
<i>Drosophila_elegans</i>	Dele\Vha14-1	ND	375							ND	ggcgcgagtgTCATGTGAtagagaccagct	5'	
<i>Drosophila_rhopaloea</i>	Drho\Vha14-1	ND	375							ND	ggcgcaaatgggTCATGTGAtagagaccagct	5'	
<i>Drosophila_ficusphila</i>	Dfic\Vha14-1	ND	375							ND	gcgcgcagagggTCATGTGAtagagaccagct	5'	
<i>Drosophila_kikkawai</i>	Dkik\Vha14-1	ND	375							ND	ctactcgcgggtTCATGTGAagaccagct	5'	
<i>Drosophila_bipunctata</i>	Dbip\Vha14-1	ND	375							ND	acactgttcgtTCATGTGAtagagaccagct	5'	
<i>Drosophila_ananassae</i>	Dana\GF13376	ND	375							ND	actctattcgtTCATGTGAtagagaccagct	5'	
<i>Drosophila_pseudoobscura</i>	Dpse\Vha14-1	ND	375							ND	gaagaagaaggTCATGTGAtagagaccaacc	5'	
<i>Drosophila_persimilis</i>	Dper\GL11862	ND	375							ND	gaagaagaaggTCATGTGAtagagaccaacc	5'	
<i>Drosophila_miranda</i>	Dmir\Vha14-1	ND	375							ND	gaagaagaaggTCATGTGAtagagaccaacc	5'	
<i>Drosophila_willistoni</i>	Dwil\GK12172	ND	54	407	82	90	206	60	33	ND	tcgtgacagatTCAGCTGAccatttttct	5'	
<i>Drosophila_albomicans</i>	Dalb\Vha14-1	ND	ND	ND	82	320	206	57	33	ND	ND		
<i>Drosophila_mojavensis</i>	Dmoj\GI23969	ND	54	210	82	698	206	64	33	ND	tcgtgactccgTCAGCTGAcattttattaa	5'	
<i>Drosophila_virilis</i>	Dvir\GJ22513	ND	54	101	82	8390	206	57	33	ND	tcgtgacttcgTCAGCTGAcattttacttgg	5'	
	Dvir\GJ10919	ND	375							ND	tcgtgacttcgTCAGCTGAcattttgcttgg	5'	
<i>Drosophila_grimshawi</i>	Dgri\GH22329	ND	54	1903	82	385	206	67	33	ND	gcgtgacagcagTCAGCTGAcagttttctaa	5'	
Paralog: Vha14-2 (CG1076)													
<i>Drosophila_melanogaster</i>	Dmel\Vha14-2(RB)	65	54	62	82	119	206	58	33	152			
<i>Drosophila_simulans</i>	Dsim\GD19837	ND	54	56	82	89	206	58	33	ND			
<i>Drosophila_sechellia</i>	Dsec\GM10855	ND	54	56	82	89	206	58	33	ND			

<i>Drosophila_yakuba</i>	Dyak\GE10180	ND	54	56	82	66	206	58	33	ND			
<i>Drosophila_erecta</i>	Dere\GG13113	ND	54	58	82	110	206	58	33	ND			
<i>Drosophila_biarmipes</i>	Dbia\Vha14-2	ND	54	59	82	181	206	59	33	ND			
<i>Drosophila_suzukii</i>	Dsuz\Vha14-2	ND	54	59	82	164	206	64	33	ND			
<i>Drosophila_takahashii</i>	Dtak\Vha14-2	ND	54	57	82	3977	206	67	33	ND			
<i>Drosophila_eugracilis</i>	Deug\Vha14-2	ND	54	66	82	51	206	59	33	ND			
<i>Drosophila_elegans</i>	Dele\Vha14-2	ND	54	55	82	199	206	55	33	ND			
<i>Drosophila_rhopaloea</i>	Drho\Vha14-2	ND	54	56	82	1049	206	55	33	ND			
<i>Drosophila_ficusphila</i>	Dfic\Vha14-2	ND	54	52	82	133	206	55	33	ND			
<i>Drosophila_kikkawai</i>	Dkik\Vha14-2	ND	75?	48	82	54	206	58	33	ND			
<i>Drosophila_bipectinata</i>	Dbip\Vha14-2	ND	54	51	82	59	206	60	33	ND			
<i>Drosophila_ananassae</i>	Dana\GF16369*	ND	54	53	82	59	206	58	33	ND			
<i>Drosophila_pseudoobscura</i>	Dpse\GA26491	ND	54	51	82	64	206	59	33	ND			
<i>Drosophila_persimilis</i>	Dper\GL24046	ND	ND	ND	ND	64	206	59	33	ND			
<i>Drosophila_miranda</i>	Dmir\Vha14-2	ND	54	51	82	64	206	59	33	ND			
<i>Drosophila_willistoni</i>	Dwil\GK13026*	ND	54	55	82	57	206	63	33	ND			
<i>Drosophila_albomicans</i>	Dalb\Vha14-2	ND	54	53	82	58	206	63	33	ND			
<i>Drosophila_mojavensis</i>	Dmqj\GI24384*	ND	54	62	82	85	206	59	33	ND			
<i>Drosophila_virilis</i>	Dvir\GJ14239*	ND	54	79	82	76	206	62	33	ND			
<i>Drosophila_grimshawi</i>	Dgrl\GH14013*	ND	54	67	82	49	206	65	33	ND			

Key: UTR region, CDS region