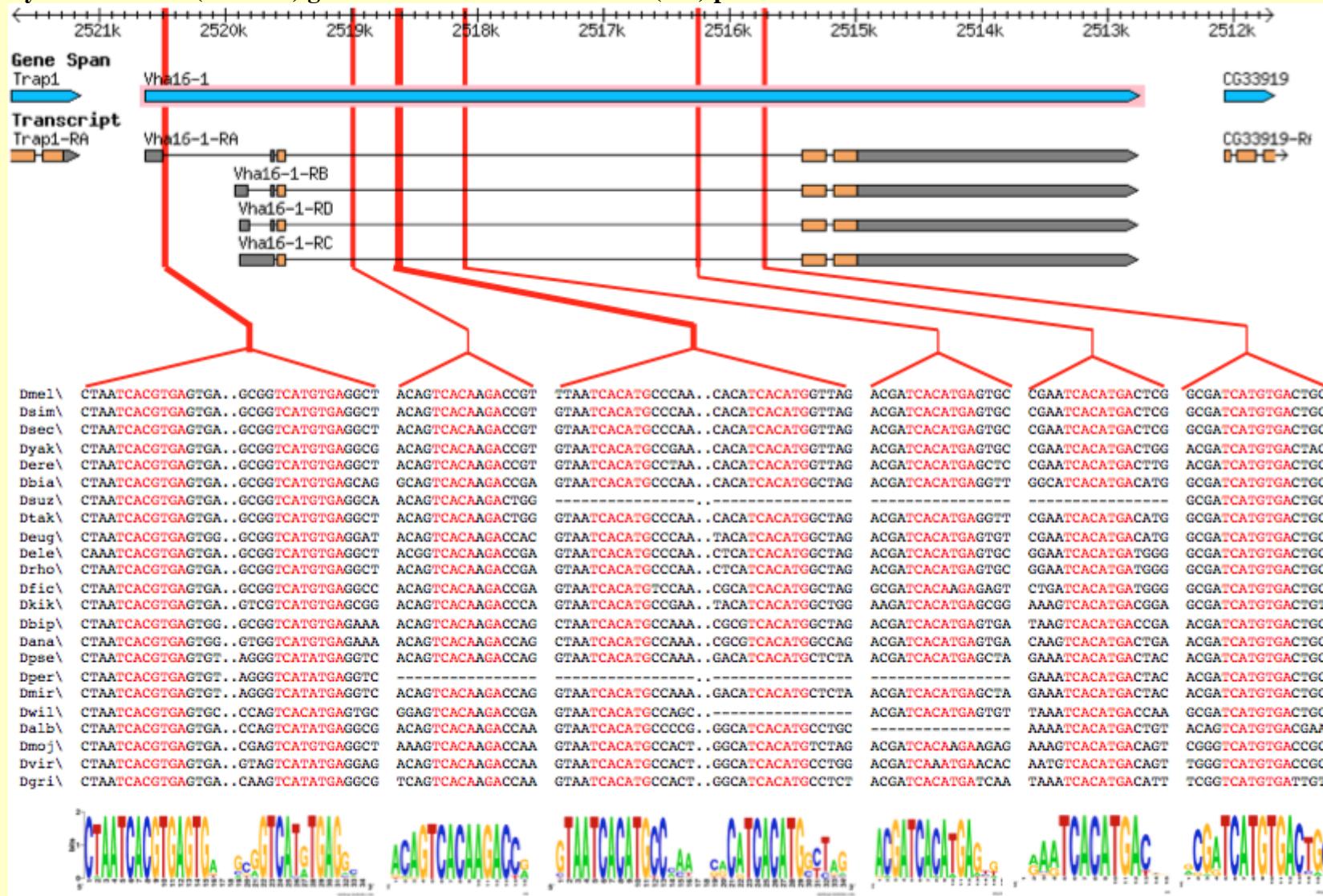


Gene Cluster ID	Atp6v0c
Drosophila melanogaster gene	<b>Vha16-1 (CG3161)</b>
FlyBase ID	<a href="#">FBgn0262736</a>
Predicted function	<b>ATPase, H<sup>+</sup> transporting, V<sub>0</sub> subunit c</b>
Protein size	159 amino acids
Cytogenetic map	2R:42B2-42B2
Gene sequence location	<a href="#">2R:2512747..2520633[-]</a>
Dmel CLEAR sequence(s)	<b>TCACGTGA; TCATGTGA; TCACAAGA; TCACATGC; TCACATGG; TCACATGA; TCACATGA; TCATGTGA</b>
CLEAR sequence location(s)	2R:2520496..2520503; 2R:2520461..2520468; 2R:2518990..2518997; 2R:2518647..2518654; 2R:2518597..2518604; 2R:2518099..2518106; 2R:2516246..2516253; 2R:2515721..2515728
Drosophila Atp6v0c paralogs	<a href="#">Vha16-2</a> (CG32089); <a href="#">Vha16-3</a> (CG32090); <a href="#">Vha16-4</a> (CG9013); <a href="#">Vha16-5</a> (CG6737)

### FlyBase Vha16-1 (CG3161) gene model & CLEAR element (red) positions:



### Atpv0c gene structure comparison:

Key: UTR region (blue), CDS region (red)

Species	Atpv0c orthologs	5'exon	intron	exon	intron	exon3'	Extended CLEAR region	Position	bps from
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										TSS	
<i>Drosophila_melanogaster</i>	<a href="#">Dmel\Vha16-1</a>	96+854+29	85	4105	190	57	205	2228	ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggctagccctgc	exon/int intron1	93 128
<i>Drosophila_simulans</i>	<a href="#">Dsim\GD10321</a>		85	4121	190	60	205		ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggctagccctgc	exon/int? intron1	
<i>Drosophila_sechellia</i>	<a href="#">Dsec\GM20869</a>		85	4106	190	60	205		ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggctagccctgc	exon/int? intron1	
<i>Drosophila_yakuba</i>	<a href="#">Dyak\Vha16</a>		85	3891	190	61	205		ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggcgagactgc	exon/int? intron1	
<i>Drosophila_erecta</i>	<a href="#">Dere\GG10820</a>		85	4097	190	57	205		ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggctagccctgc	exon/int? intron1	
<i>Drosophila_biarmipes</i>	<a href="#">Dbia\Vha16-1</a>		85	4328	190	68	205		ttagatttctaaTCACGTGAgtaaaaaggcaa aaagataggcggTCATGTGAgcaggccagccc	exon/int? intron1	
<i>Drosophila_suzukii</i>	<a href="#">Dsuz\Vha16-1</a>		85	ND	190	60	205		ttagatttctaaTCACGTGAgtaaaaagcaa aaagataggcggTCATGTGAggcaagccctgc	exon/int? intron1	
<i>Drosophila_takahashii</i>	<a href="#">Dtak\Vha16-1</a>		85	4179	190	71	205		ttagatttctaaTCACGTGAgtaaaaagcca aaagataggcggTCATGTGAggctagccctgc	exon/int? intron1	
<i>Drosophila_eugracilis</i>	<a href="#">Deug\Vha16-1</a>		85	4018	190	57	205		ttagatttctaaTCACGTGAgtgaaaaagcat gecgateggggTCATGTGAggatagectgcc	exon/int? intron1	
<i>Drosophila_elegans</i>	<a href="#">Dele\Vha16-1</a>		85	4592	190	57	205		ttagatttcaaTCACGTGAgtaaaaaaaaga aaagataggcggTCATGTGAggctcgctgc	exon/int? intron1	
<i>Drosophila_rhopaloa</i>	<a href="#">Drho\Vha16-1</a>		85	4326	190	58	205		ttagatttctaaTCACGTGAgtaaaaagctaa aaagatggcggTCATGTGAggctcgctgc	exon/int? intron1	
<i>Drosophila_ficusphila</i>	<a href="#">Dfic\Vha16-1</a>		85	4020	190	57	205		ttagatttctaaTCACGTGAgtaaaaagcag aaagataggcggTCATGTGAggcccagcggaa	exon/int? intron1	
<i>Drosophila_kikkawai</i>	<a href="#">Dkik\Vha16-1</a>		85	3795	190	70	205		ttagatttctaaTCACGTGAgtaagaagagt catagttagtcgTCATGTGAgcggaaaagtt	exon/int? intron1	
<i>Drosophila_bipectinata</i>	<a href="#">Dbip\Vha16-1</a>		85	3476	190	68	205		ttagatttctaaTCACGTGAgtgaaaaaaac gtaataaggcggTCATGTGAaaaaaagtctt	exon/int? intron1	
<i>Drosophila_ananassae</i>	<a href="#">Dana\GF13808</a>		85	3429	190	70	205		ttagatttctaaTCACGTGAgtgaaaaaaaca gtaataagtggTCATGTGAgaaaaaagtctt	exon/int? intron1	
<i>Drosophila_pseudoobscura</i>	<a href="#">Dpse\GA16335</a>		85	4293	190	72	205		ttagatttctaaTCACGTGAgtgtgaacaaat acgaccagagggTCATATGAggtccaataaaa	exon/int? intron1	
<i>Drosophila_persimilis</i>	<a href="#">Dper\GL20293</a>		85	3204?	190	72	205		ttagatttctaaTCACGTGAgtgtgaacaaat acgaccagagggTCATATGAggtccaataaaa	exon/int? intron1	
<i>Drosophila_miranda</i>	<a href="#">Dmir\Vha16-1</a>		85	3204?	190	72	205		ttagatttctaaTCACGTGAgtgtgaacaaat acggccagagggTCATATGAggtccaataaaa	exon/int? intron1	
<i>Drosophila_willistoni</i>	<a href="#">Dwil\GK19648</a>		85	5070	190	76	205		ttaaatttctaaTCACGTGAgtgccgagatac aaaactctcagTCACATGAggtcgaggctt	exon/int? intron1	
<i>Drosophila_albomicans</i>	<a href="#">Dalb\Vha16-1</a>		85	>5215	190	65	205		ttagatttctaaTCACGTGAgtaaaaaaaaaaaa acacaaccagTCATATGAggcgcaatcaa	exon/int? intron1	

<i>Drosophila_mojavensis</i>	<a href="#">Dmoj\GI21278</a>		85	5825	190	71	205		ttagatttctaaTCACGTGAgtaaaaaaaag gaaacaatcgagTCATGTGAggctccatcgaa	exon/int? intron1	
<i>Drosophila_virilis</i>	<a href="#">Dvir\GJ20880</a>		82	5409	190	59	205		ttagatttctaaTCACGTGAgtaaaaaaaa aaaaaacagtagTCATATGAggagcaatcgaa	exon/int? intron1	
<i>Drosophila_grimshawi</i>	<a href="#">Dgri\GH22892</a>		91	5471	190	72	205		ttagatttctaaTCACGTGAgtaaaaaaaaata ttcacaatcaagTCATATGAggccaatcgta	exon/int? intron1	

Vha16-2 (CG32089)

<i>Drosophila_melanogaster</i>	<a href="#">Dmel\Vha16-2</a>	40	477	78						
<i>Drosophila_simulans</i>	<a href="#">Dsim\Vha16-2</a>		477							
<i>Drosophila_sechellia</i>	<a href="#">Dsec\GM25274</a>		477							
<i>Drosophila_yakuba</i>	<a href="#">Dyak\GE21813</a>		477							
<i>Drosophila_erecta</i>	<a href="#">Dere\GG15505</a>		477							
<i>Drosophila_biarmpipes</i>	<a href="#">Dbia\Vha16-2</a>		477							
<i>Drosophila_suzukii</i>	<a href="#">Dsuz\Vha16-2</a>		477							
<i>Drosophila_takahashii</i>	<a href="#">Dtak\Vha16-2</a>		477							
<i>Drosophila_eugracilis</i>	<a href="#">Deug\Vha16-2</a>		480							
<i>Drosophila_elegans</i>	<a href="#">Dele\Vha16-2</a>		480							
<i>Drosophila_rhopaloa</i>	<a href="#">Drho\Vha16-2</a>		480							
<i>Drosophila_ficusphila</i>	<a href="#">Dfic\Vha16-2</a>		477							
<i>Drosophila_kikkawai</i>	<a href="#">Dkik\Vha16-2</a>		477							
<i>Drosophila_bipunctinata</i>	<a href="#">Dbip\Vha16-2</a>		480							
<i>Drosophila_ananassae</i>	<a href="#">Dana\GF25266</a>		480							
<i>Drosophila_pseudoobscura</i>	<a href="#">Dpse\GA26306</a>		480							
<i>Drosophila_persimilis</i>	<a href="#">Dper\GL21512</a>		480							
<i>Drosophila_miranda</i>			477							
<i>Drosophila_willistoni</i>	<a href="#">Dwil\GK17171</a>		483							
<i>Drosophila_albomicans</i>	<a href="#">Dalb\Vha16-2</a>		477							
<i>Drosophila_mojavensis</i>	<a href="#">Dmoj\GI11613</a>		477							
<i>Drosophila_virilis</i>	<a href="#">Dvir\GJ11292</a>		480							

<i>Drosophila_grimshawi</i>	<a href="#">Dgri\GH16653</a>		480				
<b>Vha16-3 (CG32090)</b>							
<i>Drosophila_melanogaster</i>	<a href="#">Dmel\Vha16-3</a>		477				
<i>Drosophila_simulans</i>	<a href="#">Dsim\GD14307</a>		477				
<i>Drosophila_sechellia</i>	<a href="#">Dsec\GM25273</a>		477				
<i>Drosophila_yakuba</i>	<a href="#">Dyak\GE21812</a>		477				
<i>Drosophila_erecta</i>	<a href="#">Dere\GG15504</a>		477				
<i>Drosophila_biarmipes</i>	<a href="#">Dbia\Vha16-3</a>		477				
<i>Drosophila_suzukii</i>	<a href="#">Dsuz\Vha16-3</a>		477				
<i>Drosophila_takahashii</i>	<a href="#">Dtak\Vha16-3</a>		477				
<i>Drosophila_eugracilis</i>	<a href="#">Deug\Vha16-3</a>		477				
<i>Drosophila_elegans</i>	<a href="#">Dele\Vha16-3</a>		477				
<i>Drosophila_rhopaloa</i>	<a href="#">Drho\Vha16-3</a>		477				
<i>Drosophila_ficusphila</i>	<a href="#">Dfic\Vha16-3</a>		477				
<i>Drosophila_kikkawai</i>	<a href="#">Dkik\Vha16-3</a>		477				
<i>Drosophila_bipunctinata</i>	<a href="#">Dbip\Vha16-3</a>		474				
<i>Drosophila_ananassae</i>	<a href="#">Dana\GF25265</a>		474				
<i>Drosophila_pseudoobscura</i>	<a href="#">Dpse\GA26304</a>		489				
<i>Drosophila_persimilis</i>	<a href="#">Dper\GL21511</a>		489				
<i>Drosophila_miranda</i>	<a href="#">Dmir\Vha16-3</a>		489				
<i>Drosophila_willistoni</i>	<a href="#">Dwil\GK17170</a>		483				
<i>Drosophila_albomicans</i>	<a href="#">Dalb\Vha16-3</a>		486				
<i>Drosophila_mojavensis</i>	<a href="#">Dmoj\GI11612</a>		477				
<i>Drosophila_virilis</i>	<a href="#">Dvir\GJ11291</a>		480				
<i>Drosophila_grimshawi</i>	<a href="#">Dgri\GH16652</a>		486				
<b>Vha16-4 (CG9013)</b>							
<i>Drosophila_melanogaster</i>	<a href="#">Dmel\Vha16-4</a>	46	468	53			

<i>Drosophila_simulans</i>	<a href="#">Dsim\GD25509</a>		477				
<i>Drosophila_sechellia</i>	<a href="#">Dsec\GM20023</a>		477				
<i>Drosophila_yakuba</i>	<a href="#">Dyak\GE14233</a>		477				
<i>Drosophila_erecta</i>	<a href="#">Dere\GG22236</a>		477				
<i>Drosophila_biarmipes</i>	<a href="#">Dbia\Vha16-4</a>		468				
<i>Drosophila_suzukii</i>	<a href="#">Dsuz\Vha16-4</a>		477				
<i>Drosophila_takahashii</i>	<a href="#">Dtak\Vha16-4</a>		480				
<i>Drosophila_eugracilis</i>	<a href="#">Deug\Vha16-4</a>		480				
<i>Drosophila_elegans</i>	<a href="#">Dele\Vha16-4</a>		477				
<i>Drosophila_rhopaloa</i>	<a href="#">Drho\Vha16-4</a>		477				
<i>Drosophila_ficusphila</i>	<a href="#">Dfic\Vha16-4</a>		468				
<i>Drosophila_kikkawai</i>	<a href="#">Dkik\Vha16-4</a>		471				
<i>Drosophila_bipectinata</i>	<a href="#">Dbip\Vha16-4</a>		495				
<i>Drosophila_ananassae</i>	<a href="#">Dana\GF13441*</a>		495				
<i>Drosophila_pseudoobscura</i>	<a href="#">Dpse\GA21477</a>		498				
<i>Drosophila_persimilis</i>	<a href="#">Dper\GL10498</a>		498				
<i>Drosophila_miranda</i>	<a href="#">Dmir\Vha16-4</a>		498				
<i>Drosophila_willistoni</i>	<a href="#">Dwil\GK22034</a>		483				
<i>Drosophila_albomicans</i>	<a href="#">Dalb\Vha16-4</a>		483				

#### Vha16-5 (CG6737)

<i>Drosophila_melanogaster</i>	<a href="#">Dmel\Vha16-5</a>		582				
<i>Drosophila_simulans</i>	<a href="#">Dsim\GD22230</a>		576				
<i>Drosophila_sechellia</i>	<a href="#">Dsec\GM11483</a>		576				
<i>Drosophila_yakuba</i>	<a href="#">Dyak\GE13384</a>		576				
<i>Drosophila_erecta</i>	<a href="#">Dere\GG10362</a>		576				
<i>Drosophila_biarmipes</i>	<a href="#">Dbia\Vha16-5</a>		579				
<i>Drosophila_suzukii</i>	<a href="#">Dsuz\Vha16-5</a>		576				

<i>Drosophila_takahashii</i>		Blue	Red	Blue			
<i>Drosophila_eugracilis</i>		Blue	Red	Blue			
<i>Drosophila_elegans</i>	<a href="#"><u>Dele\Vha16-5</u></a>	Blue	576	Blue			
<i>Drosophila_rhopaloa</i>	<a href="#"><u>Drho\Vha16-5</u></a>	Blue	576	Blue			
<i>Drosophila_ficusphila</i>	<a href="#"><u>Dfic\Vha16-5</u></a>	Blue	567	Blue			
<i>Drosophila_kikkawai</i>	<a href="#"><u>Dkik\Vha16-5</u></a>	Blue	558	Blue			
<i>Drosophila_bipectinata</i>	<a href="#"><u>Dbip\Vha16-5</u></a>	Blue	558	Blue			
<i>Drosophila_ananassae</i>	<a href="#"><u>Dana\GF19671</u></a>	Blue	558	Blue			
<i>Drosophila_pseudoobscura</i>	<a href="#"><u>Dpse\GA25245</u></a>	Blue	549	Blue			
<i>Drosophila_persimilis</i>	<a href="#"><u>Dper\GL26032</u></a>	Blue	549	Blue			
<i>Drosophila_miranda</i>	<a href="#"><u>Dmir\Vha16-5</u></a>	Blue	549	Blue			
<i>Drosophila_willistoni</i>	<a href="#"><u>Dwil\GK18316</u></a>	Blue	555	Blue			
<i>Drosophila_albomicans</i>	<a href="#"><u>Dalb\Vha16-5</u></a>	Blue	510	Blue			
<i>Drosophila_mojavensis</i>	<a href="#"><u>Dmoj\GI13313</u></a>	Blue	528	Blue			
<i>Drosophila_virilis</i>	<a href="#"><u>Dvir\GJ11943</u></a>	Blue	540	Blue			
<i>Drosophila_grimshawi</i>	<a href="#"><u>Dgri\GH10920</u></a>	Blue	522	Blue			