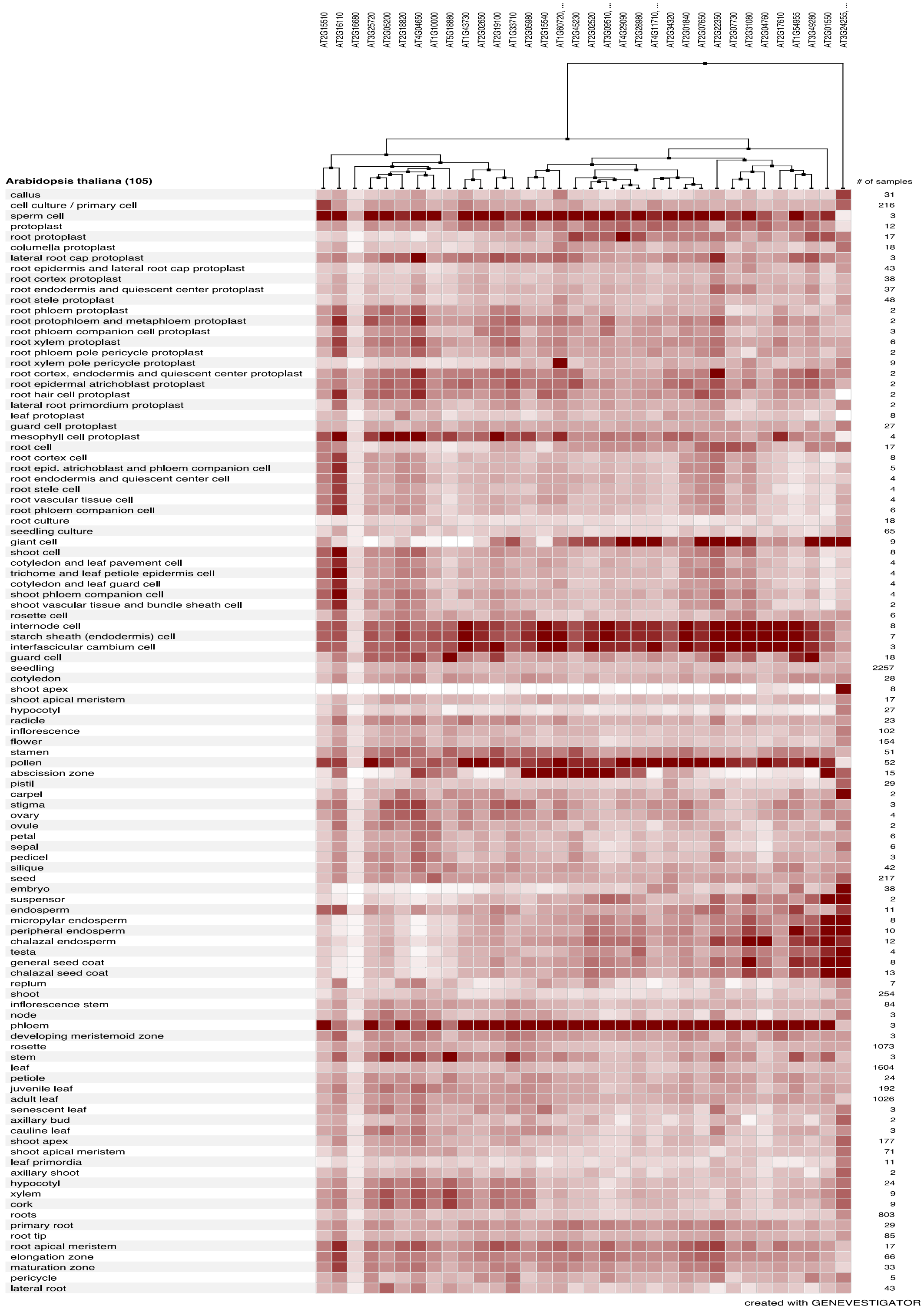
Supplementary materials to Galvan-Gordillo et al., Biologia 71, 11, 2016.

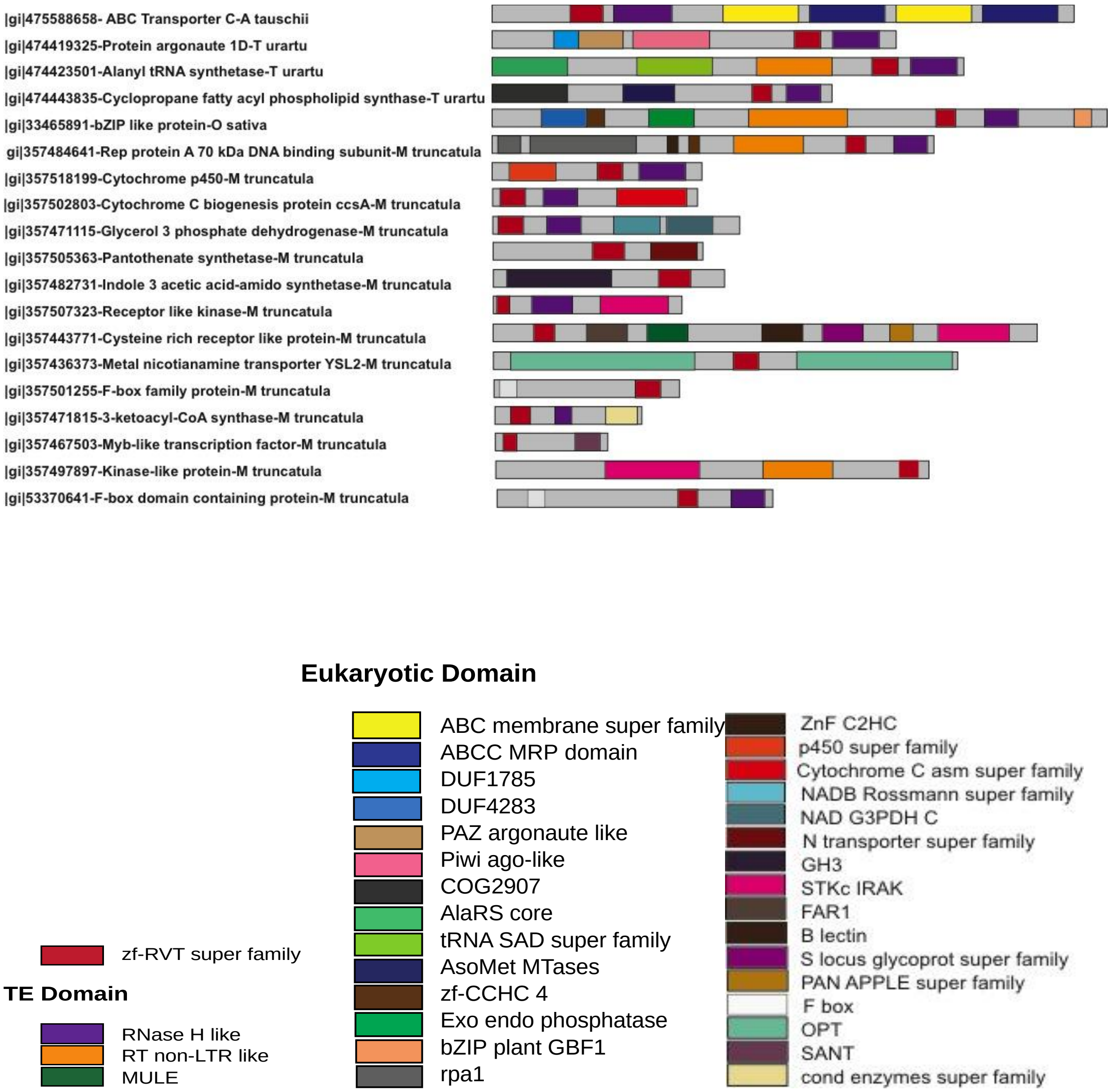
Supplementary Table 1. GO annotations of putative endogenized genes from *Arabidopsis*. Expression pattern, subcellular localization and biological roles of the putative endogenized Arabidopsis RVT-Znf genes are shown, based on TAIR (https://www.arabidopsis.org/tools/bulk/go/) and Genevestigator databases (https://genevestigator.com/gv/).

Putative Endogenous Gene	**Subcellular Location**	**Expressed in**	**Expressed During**	**Involved in**
At1g43730				
At4g04650	Stromule			Response to cold
At2g16110		hypocotyl, petiole, shoot apex		
At2g02520	Mitochondrion	Collective leaf structure, stamen, vascular leaf	LP0.2 two leaves visible stage, petal differentiation and expansion stage	
At1g33710				
At1g60720				
At5g18880	Nucleus			
At3g24255	Nucleus	Guard cell		
At4g11710				
At4g29090	Mitochondrion			
At1g10000		cauline leaf, collective leaf structure, cotyledon, flower, guard cell, hypocotyl,inflorescence meristem, leaf apex, petal, petiole, plant embryo, plant sperm cell,pollen, seed, sepal, shoot apex, shoot system, stem, vascular leaf	LP.02 two leaves visible stage, LP.04 four leaves visible stage, LP.06 six leaves visible stage, LP.10 ten leaves visible stage, LP.12 twelve leaves visible stage, M germinated pollen stage, flowering stage, mature plant embryo stage, petal differentiation and expansion stage, plant embryo bilateral stage, plant embryo cotyledonary stage, vascular leaf senescent stage	
At3g25270	Nucleus			
At3g09510	Mitochondrion			
At2g02650	Mitochondrion	Sperm cell		
At5g36905				
At2g22350				

Supplementary Fig. 1. 105 anatomical parts from 34 Arabidopsis RVT Znf genes were analyzed using the hierarchical clustering tool, using the Pearson correlation, from the GENEVESTIGATOR microarray dataset.

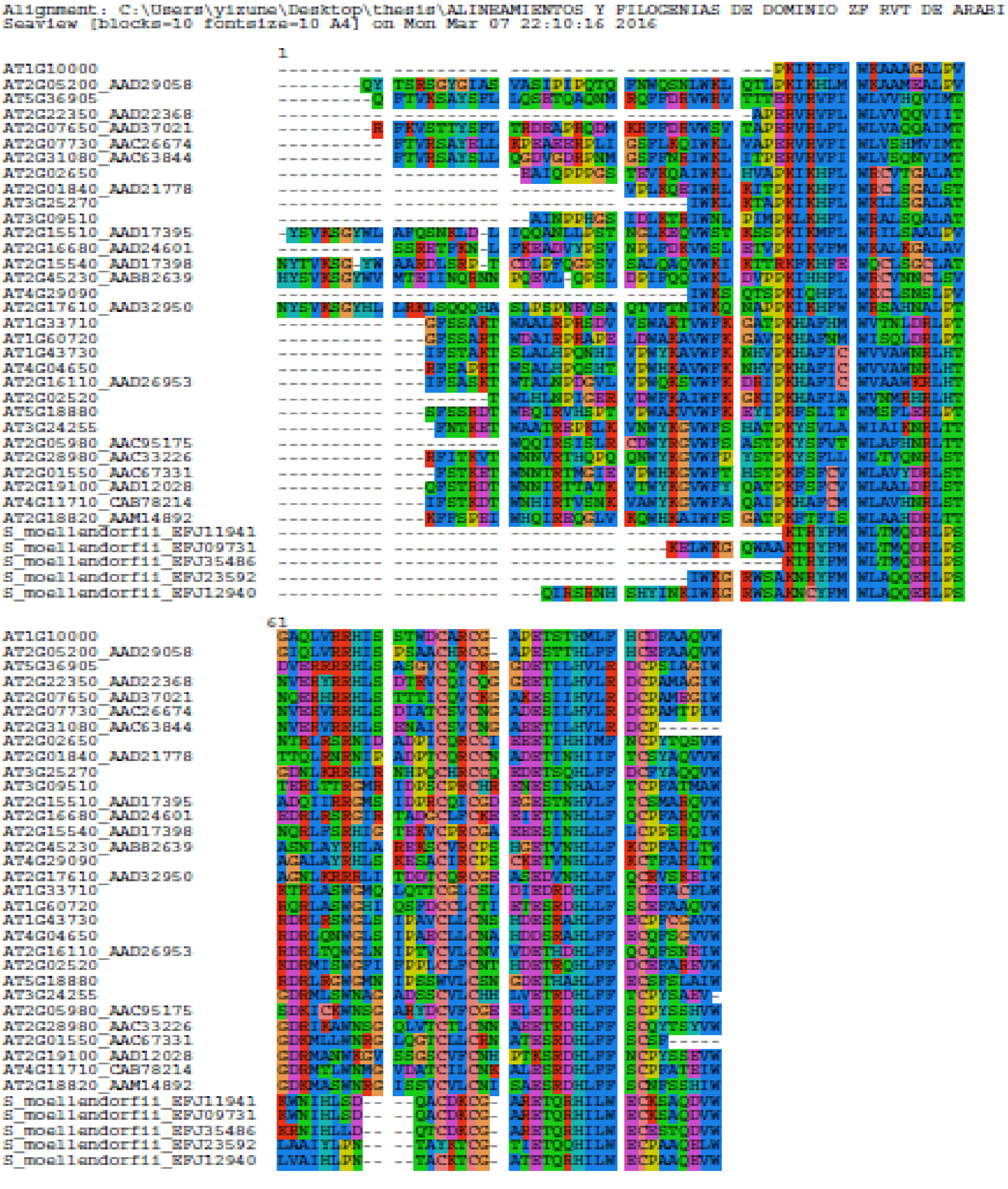


Supplementary Fig. 2. Schematic representation of additional domains in zf-RVTs from plant species. Genes containing RVT-Znf domain were obtained with the NCBI search and analysis engine using the BLAST tool against the Viridiplantae database. At4g29090 was used as query, and domain structures were obtained using the conserved domain database from NCBI.



Supplementary Fig. 3. Alignment of the RVT-Znf domain containing genes from *Arabidopsis*.

The total of 36 amino acid sequences analyzed were obtained as described in materials and methods, aligned using ClustalX2, manually edited using Seaview.



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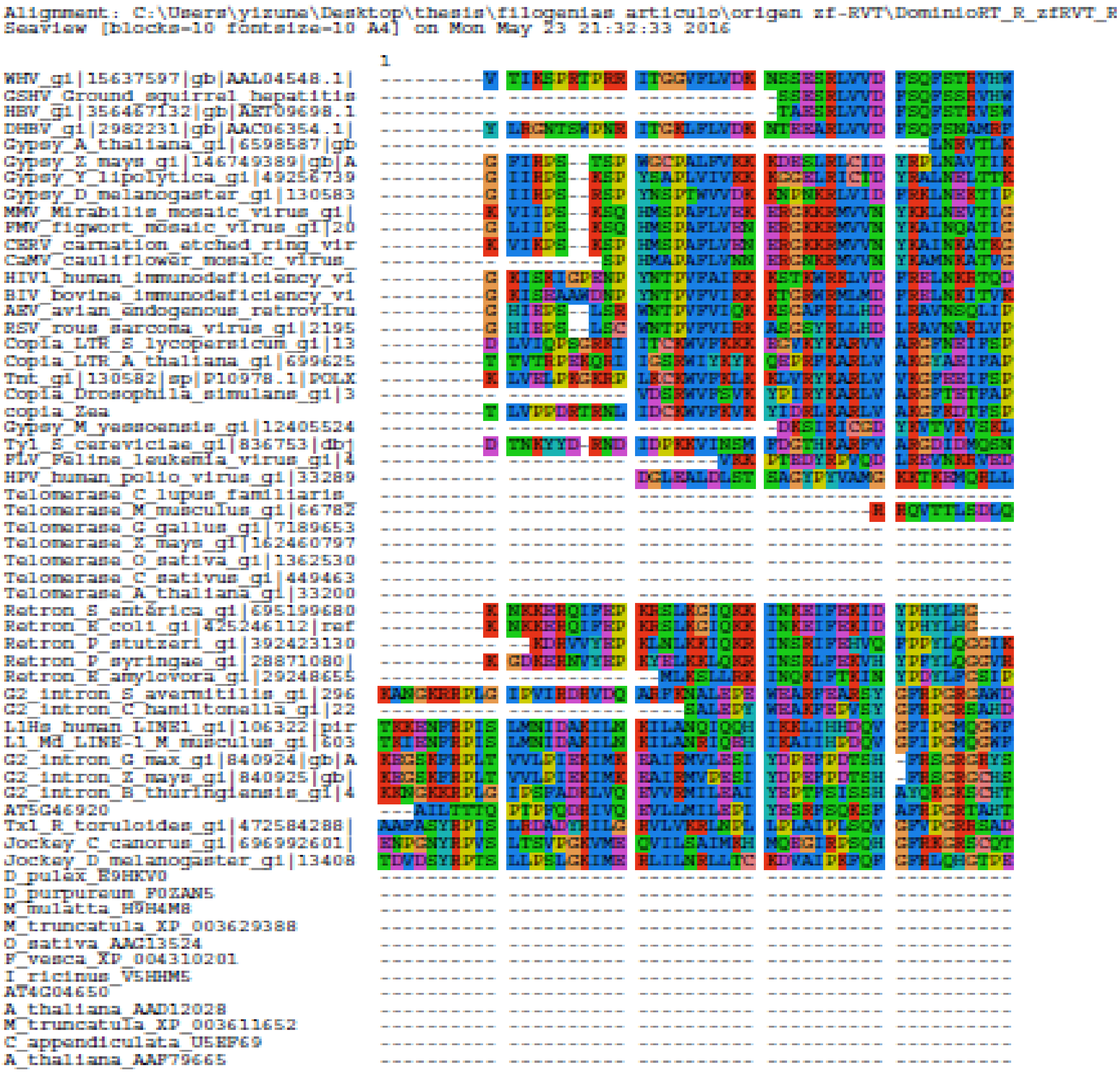
Supplementary Fig 4-8. Alignment of the origin of the RVT-Znf domain.

The total of 60 amino acid sequences analyzed were retrieved from the NCBI and Pfam databases, aligned using ClustalX2 and manually edited using Seaview.

Suppl. Fig. 4.



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Copia_LTR_A_thaliana_gi|699625     ---------T TVTRPEKQRI IGSRWIYKYK QEPRFKARLV AKGYASIPAP
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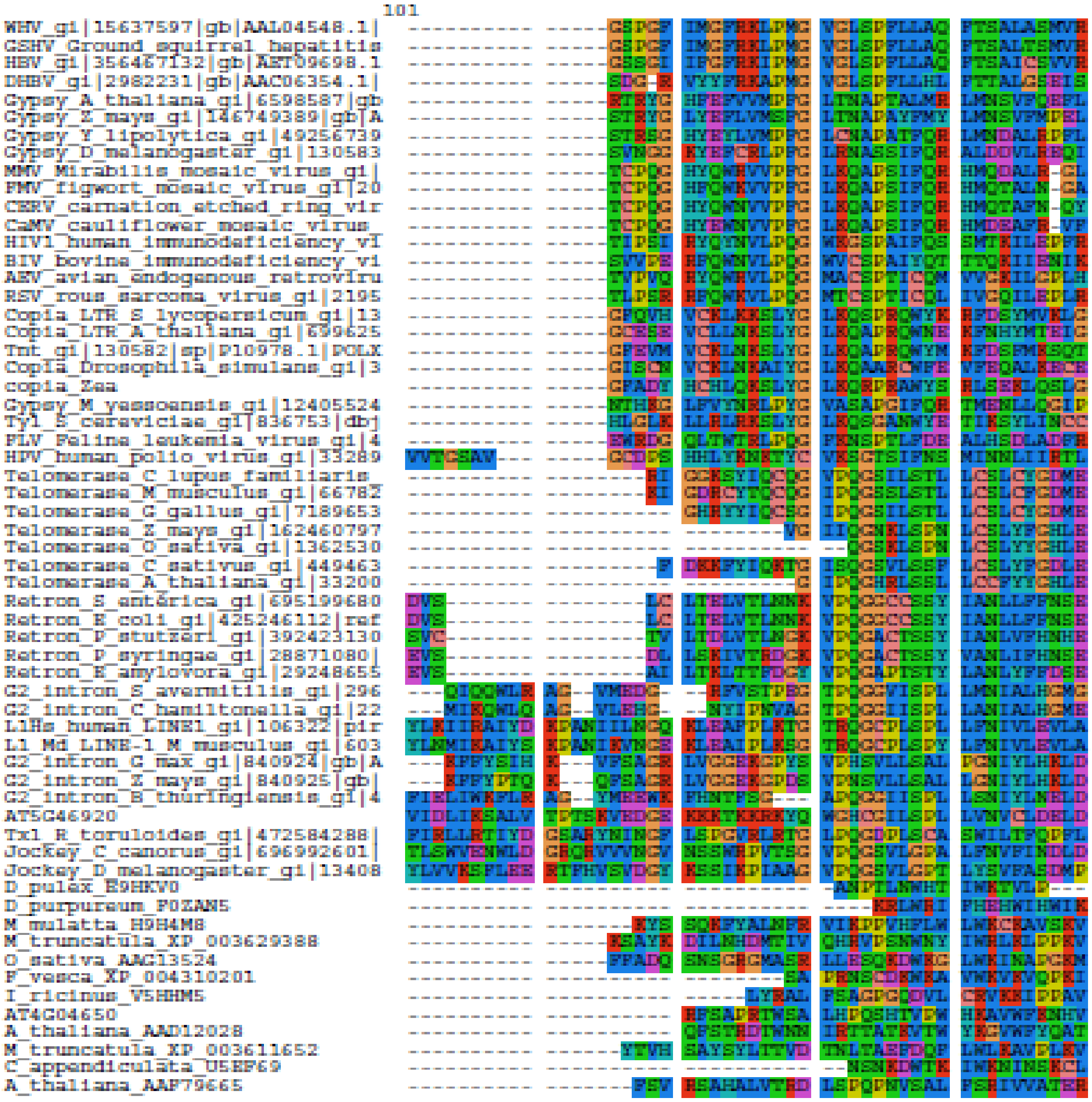
Suppl. Fig. 5.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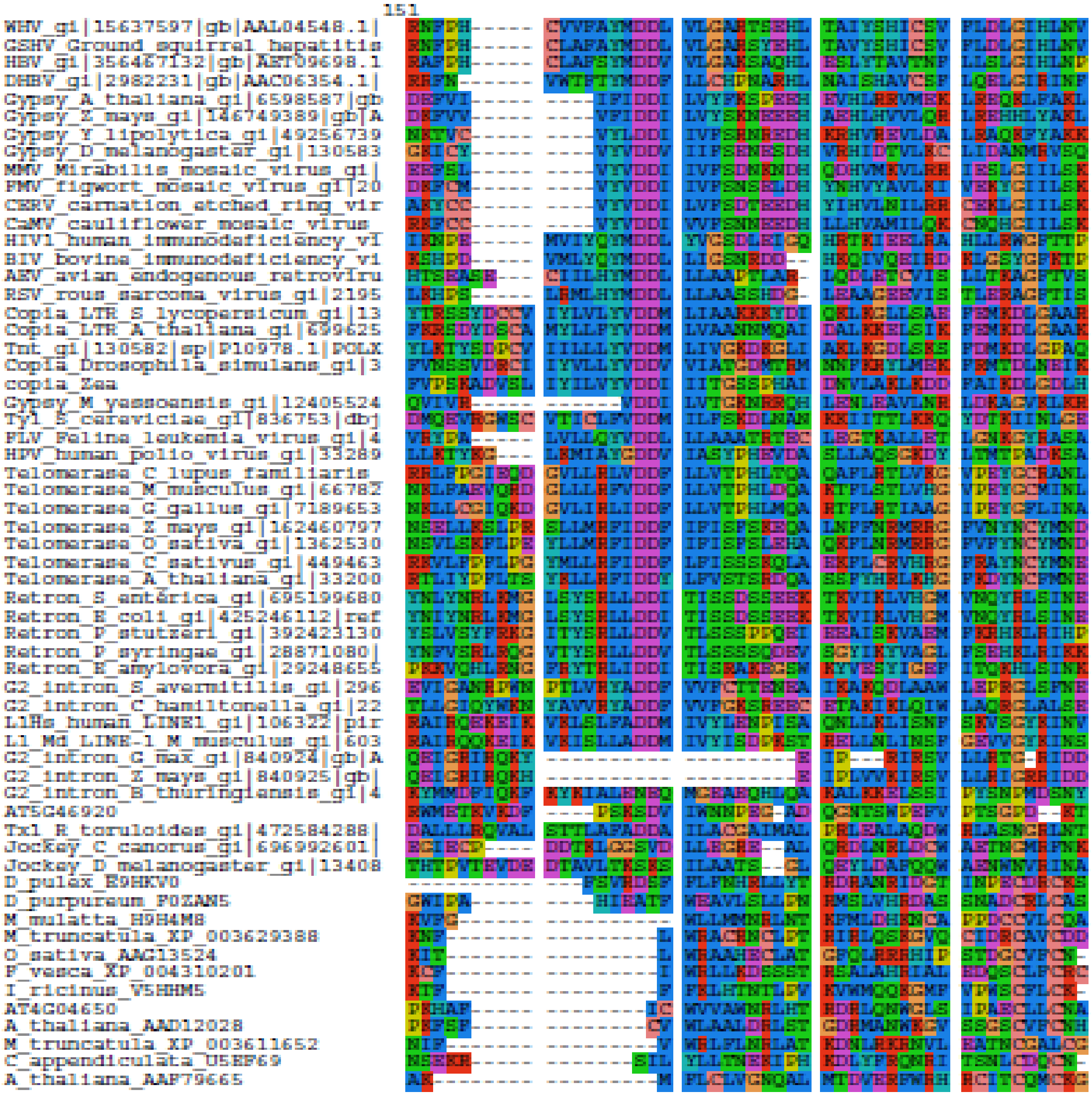
Suppl. Fig. 6.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Gypsy_D_melanogaster_gi|130583
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Suppl. Fig. 7.


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FMV_figwort_mosaic_virus_gi|20
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BIV_bovine_immunodeficiency_vi
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RSV_rous_sarcoma_virus_gi|2195
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copia_Zea
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Ty1_S_cerevisiae_gi|836753|dbj
FLV_Feline_leukemia_virus_gi|4
HPV_human_polio_virus_gi|33289
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G2_intron_B_thuringiensis_gi|4
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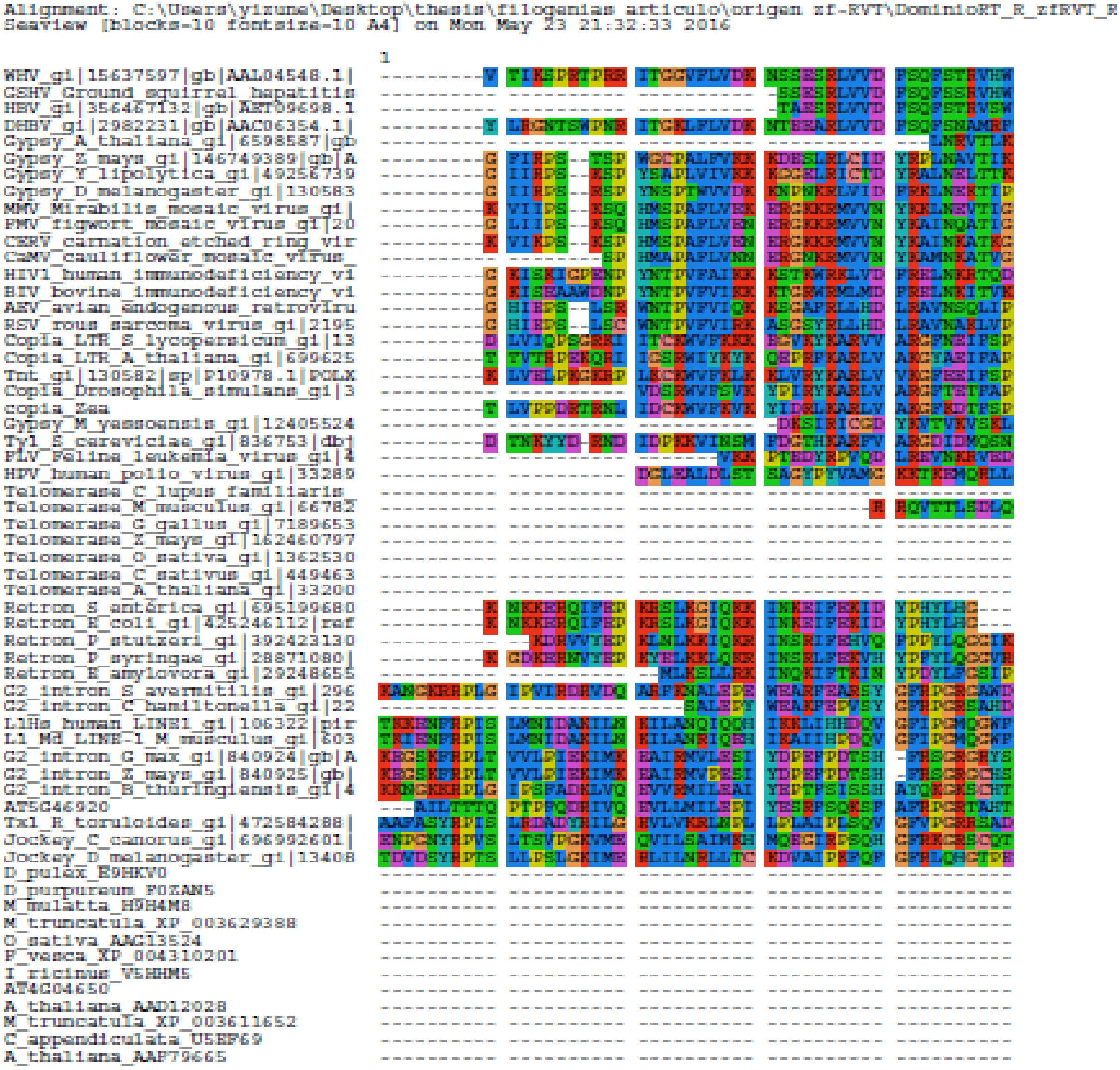
Suppl. Fig. 8.



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CERV_carnation_etched_ring_vir  ---------K VIKPS--KSP HMSPAFLVEN ERGKKRMVVN YKAINKATKG
CaMV_cauliflower_mosaic_virus_  ---------- --------SP HMAPAFLVNN ERGNKRMVVN YKAMNKATVG
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G2_intron_S_avermitilis_gi|296  RANGKRRPLG IPVIRDRVDQ ARPKNALEPE WEARPEARSY GPRPGRGAWD
G2_intron_C_hamiltonella_gi|22  ---------- ---------- ----SALEDY WEAKPEDVSY GPRPGRSAHD
L1Hs_human_LINE1_gi|106322|pir  TKRENFRPIS LMNIDAKILN KILANQIQQH IKKLIHHDQV GFIPGMQGWF
L1_Md_LINE-1_M_musculus_gi|603  TKIENFRPIS LMNIDAKILN KILANRIQEH IKAIIHPDQV GFIPGMQGWF
G2_intron_G_max_gi|840924|gb|A  KEGSKFRPLT VVLPIEKIMK EAIRMVLESI YDPEFPDTSH -FRSGRGRYS
G2_intron_Z_mays_gi|840925|gb|  KEGSKFRPLT VVLPIEKIMK EAIRMVPESI YDPEFPDTSH -FRSGRGCHS
G2_intron_B_thuringiensis_gi|4  KKNGKKRPLG IPSFADKLVQ EVVRMILEAI YEPTFSIESH AYQKGKSCHT
AT5G46920                       ---AILTTTQ PTPPQDRIVQ EVLLMILEPI YEERFSQKSF AFRPGRTAHT
Tx1_R_toruloides_gi|472584288|  AAFASYRPIS LRDADYRILG RVLVKRLNPL LPLAIPLSQV GFVPGRRSAD
Jockey_C_canorus_gi|696992601|  ENPGNYRPVS LTSVPGKVME QVILSAIMKH MQEGIRPSQH GFRKGRSCQT
Jockey_D_melanogaster_gi|13408  TDVDSYRPTS LLPSLGKIME RLIILNRLTC KDVAIPKFQP GFRLQHGTPE
D_pulex_E9HKV0                  ---------- ---------- ---------- ---------- ----------
D_purpureum_F0ZAN5              ---------- ---------- ---------- ---------- ----------
M_mulatta_H9H4M8                ---------- ---------- ---------- ---------- ----------
M_truncatula_XP_003629388       ---------- ---------- ---------- ---------- ----------
O_sativa_AAG13524               ---------- ---------- ---------- ---------- ----------
F_vesca_XP_004310201            ---------- ---------- ---------- ---------- ----------
I_ricinus_V5HHM5                ---------- ---------- ---------- ---------- ----------
AT4G04650                       ---------- ---------- ---------- ---------- ----------
A_thaliana_AAD12028             ---------- ---------- ---------- ---------- ----------
M_truncatula_XP_003611652       ---------- ---------- ---------- ---------- ----------
C_appendiculata_U5EF69          ---------- ---------- ---------- ---------- ----------
A_thaliana_AAP79665             ---------- ---------- ---------- ---------- ----------
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