



























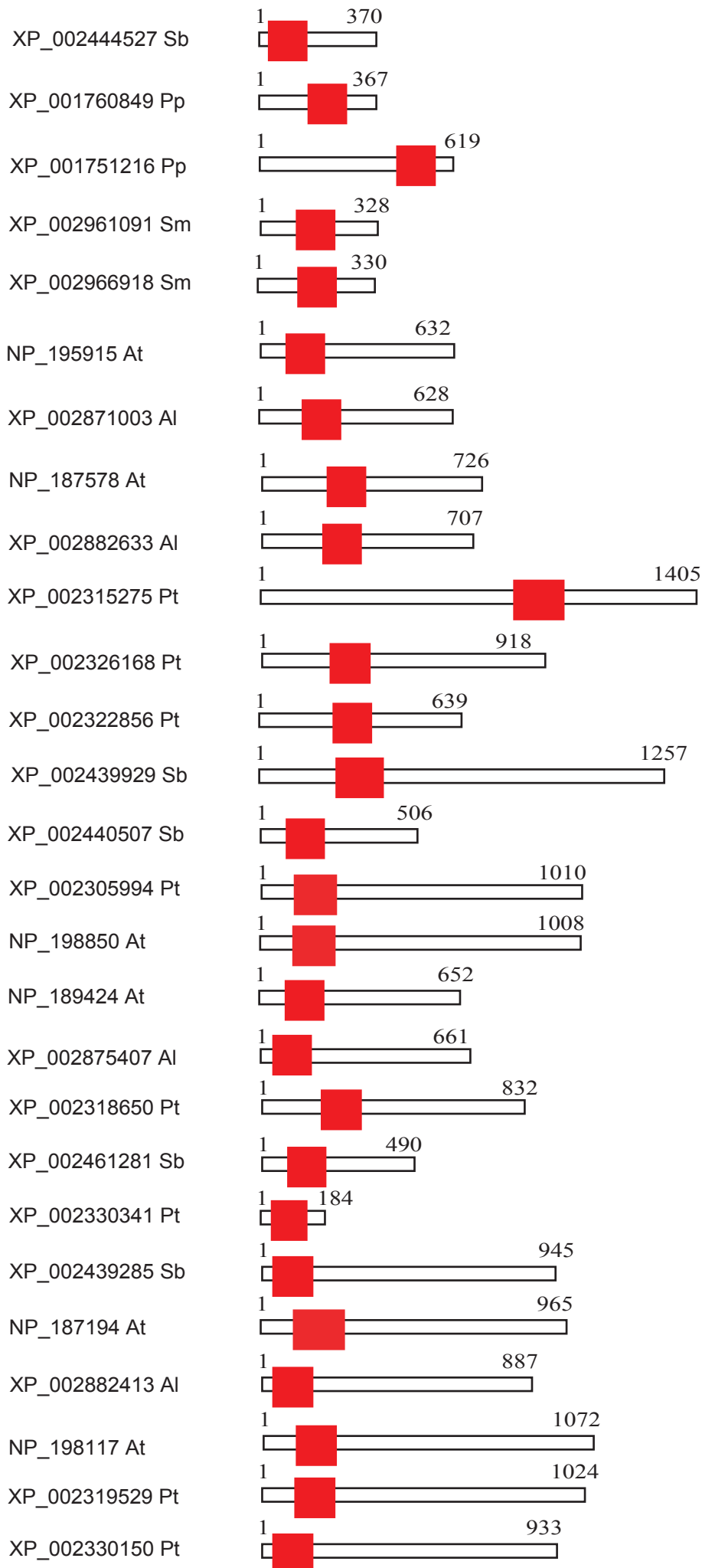


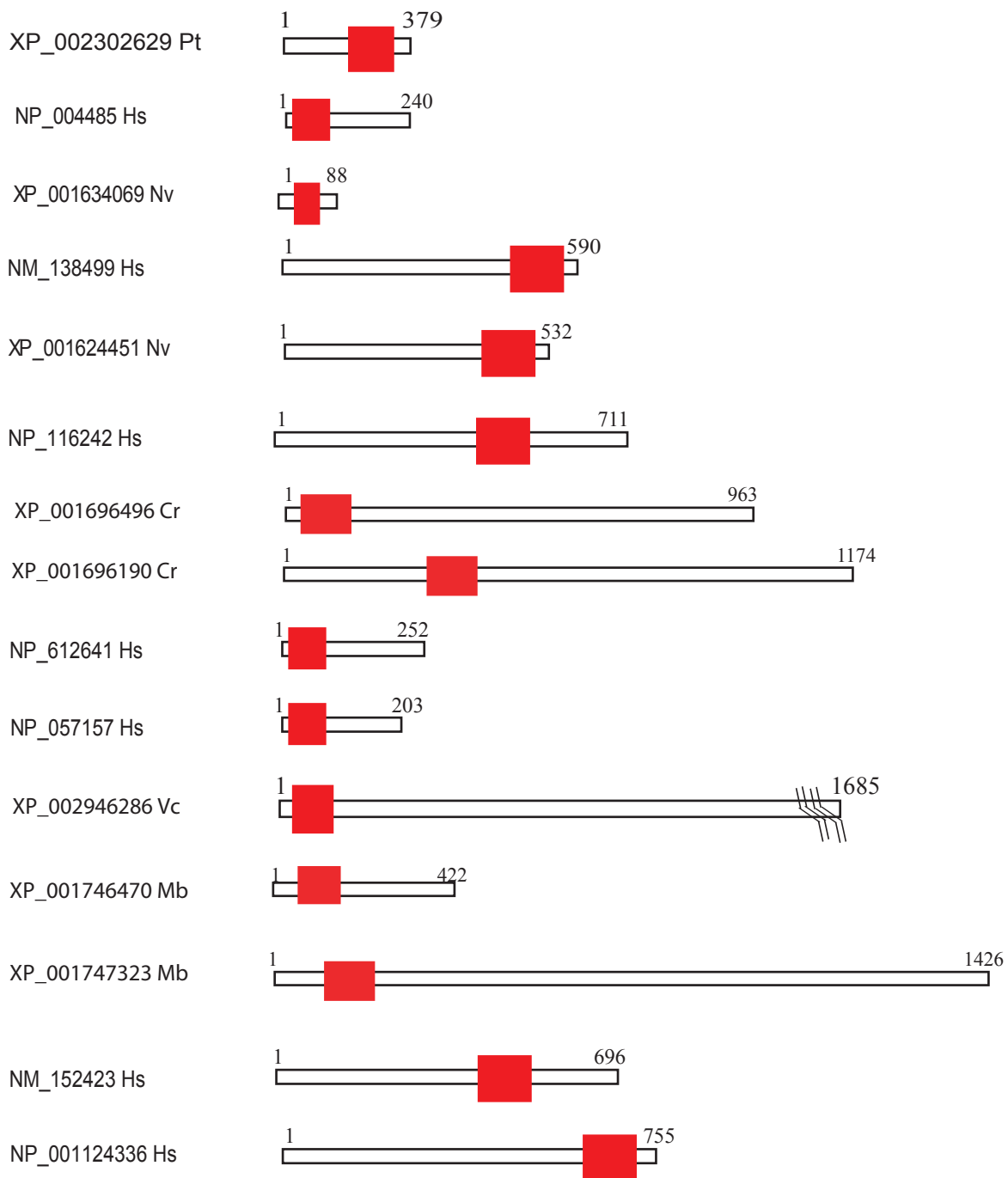
Additional file 7. Gene architecture of the PWWP domain containing proteins from the 12 genomes studied

Symbols	Domain names	Symbols	Domain names
	PWWP domain		SET domain
	PHD Plant homeo domain		DAST Domain Associated with SET in Trithorax
	Bromo_RACK7 Bromodomain		VHS_ENTH_ANTH VHS, ENTH and NTH domain superfamily
	EPL1 Enhancer of polycomb-like domain		AdoMet_MTases S-adenosylmethionine-dependent methyltransferases domain
	MDN1 AAA ATPase containing von Willebrand factor type A (vWA) domain		Dcm Site-specific DNA methylase
	Chromatin binding site		AWS domain associated with SET
	MutS Mismatch repair ATPase domain		HMG High Mobility Group (HMG)-box
	MmsB 3-hydroxyisobutyrate and related beta-hydroxyacid dehydrogenases		FATC FATC domain
	zf-CW CW-type Zinc Finger		PIKKc_ATM Ataxia telangiectasia mutated catalytic domain
	Peptidase C12 Cysteine peptidase C12 containing domain		SAND SAND domain
	Chromo Chromatin organization modifier domain		TUDOR Tudor domain
	SNF2_N SNF2 family N-terminal domain		Tudor/PWWP/MBT superfamily domain
	HELICc Helicase superfamily c-terminal domain		Rubis-s Rubisco LSMT substrate-binding
	APC APC family of proteins		

In the following figures, each protein is represented by a rectangle proportional to the length. Positions of domains are illustrated using the symbols described above. The sizes of these symbols are not proportional to their actual size. When some regions are abbreviated for too long proteins, such regions are indicated with the following start and end position: Start  End

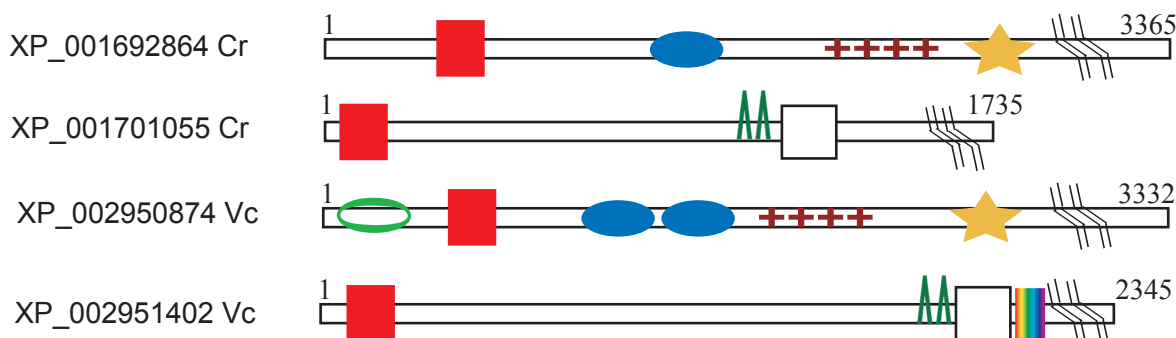
solo-PWWP domain proteins.





The PWWP domain in species- or lineage-specific combinations

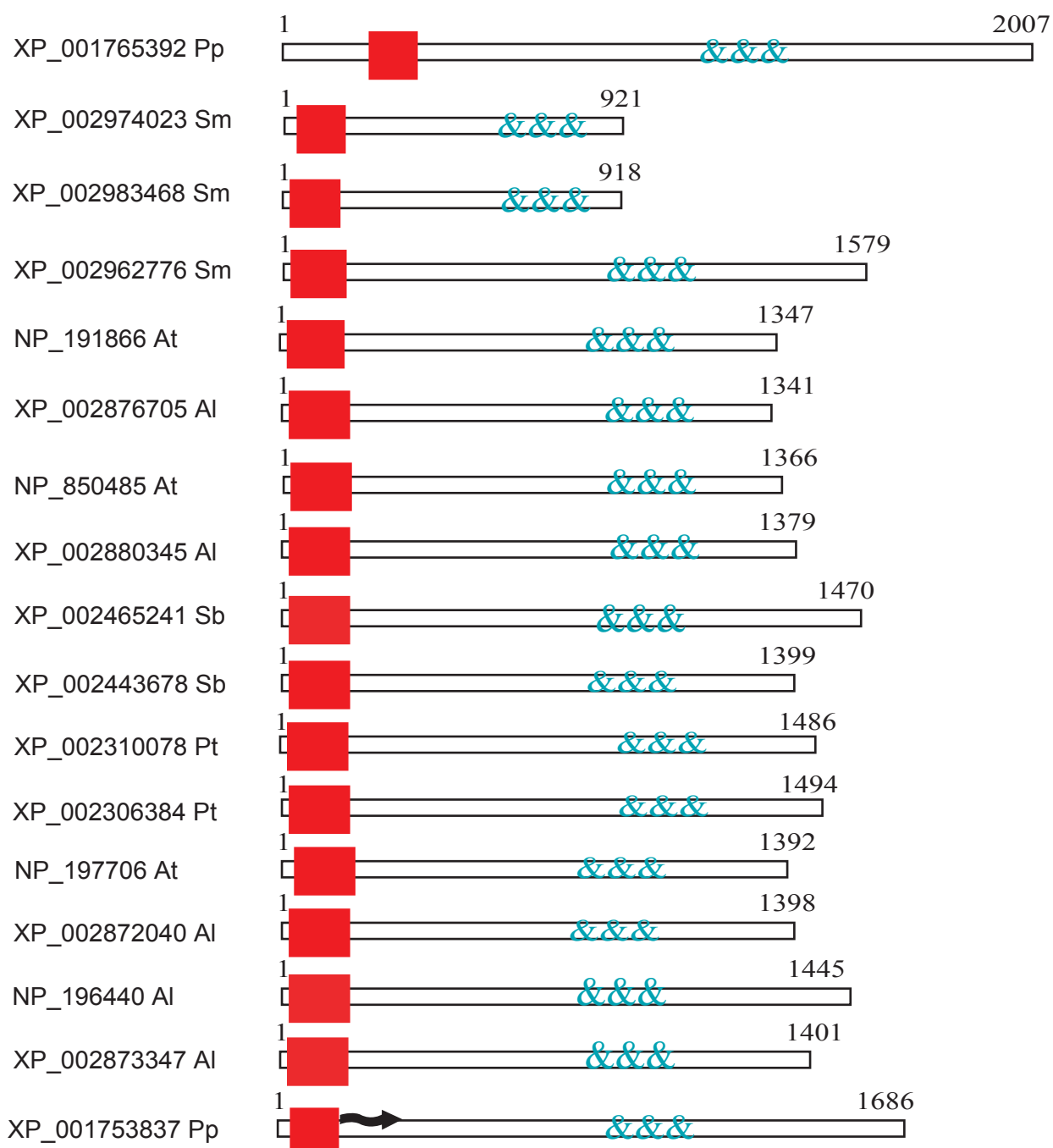
The Chlamydomonas/Volvox SNF2 and ASH1 proteins



-The O.tauri SMC protein



-The plant's HUAs



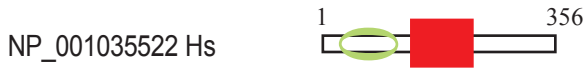
-The human-MSH6 protein



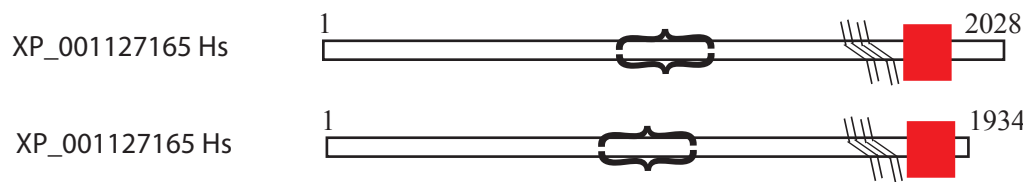
-The human GLYR protein



-The ZCWPW2 protein

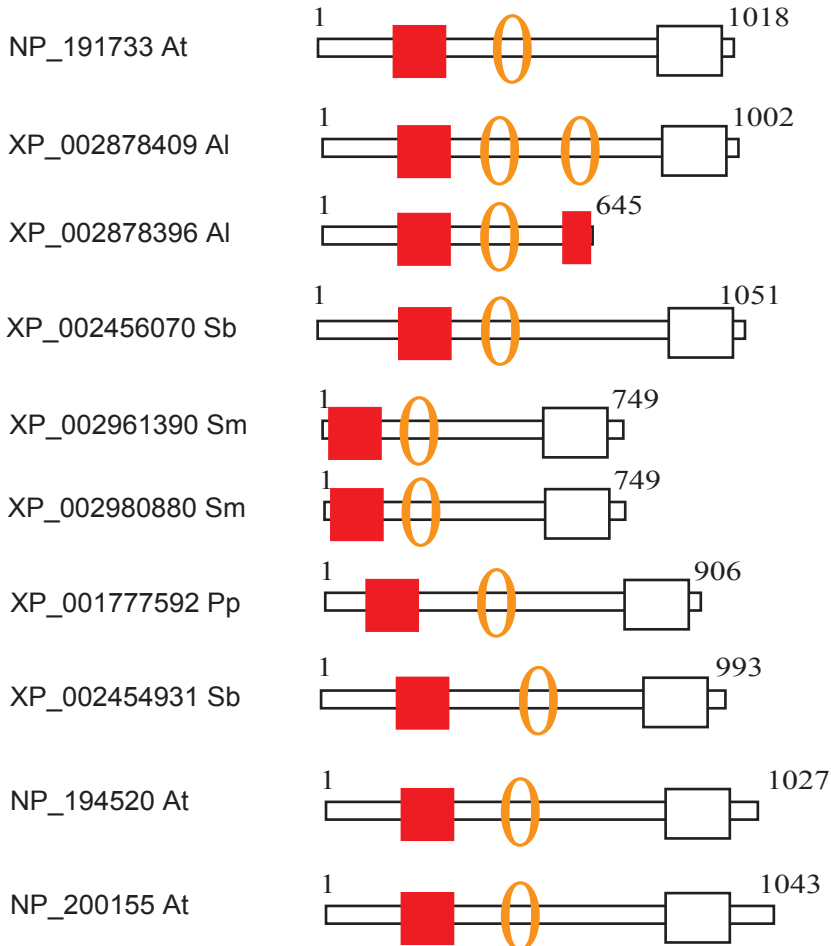


-The MUM1/EXPAND1 family

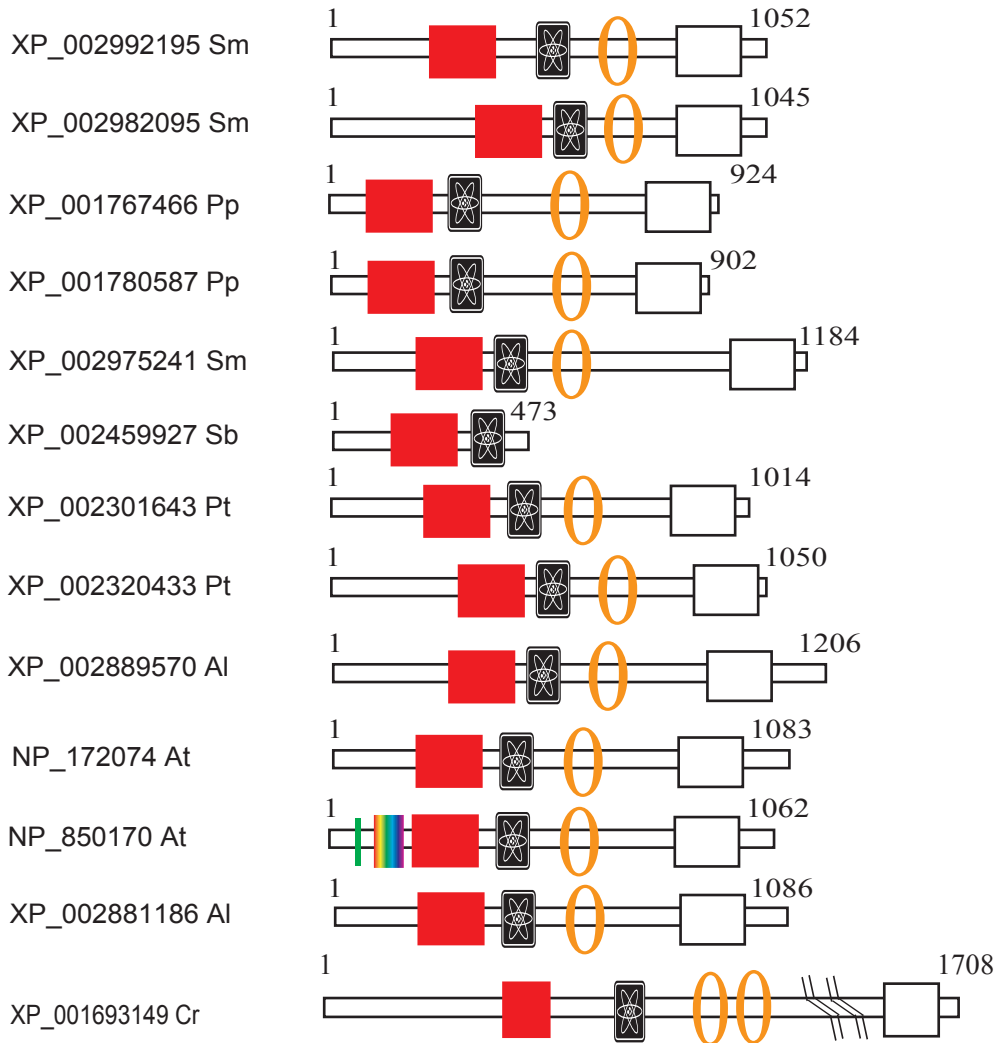


The PWWP-domain conserved in the evolution of plant and animal lineages

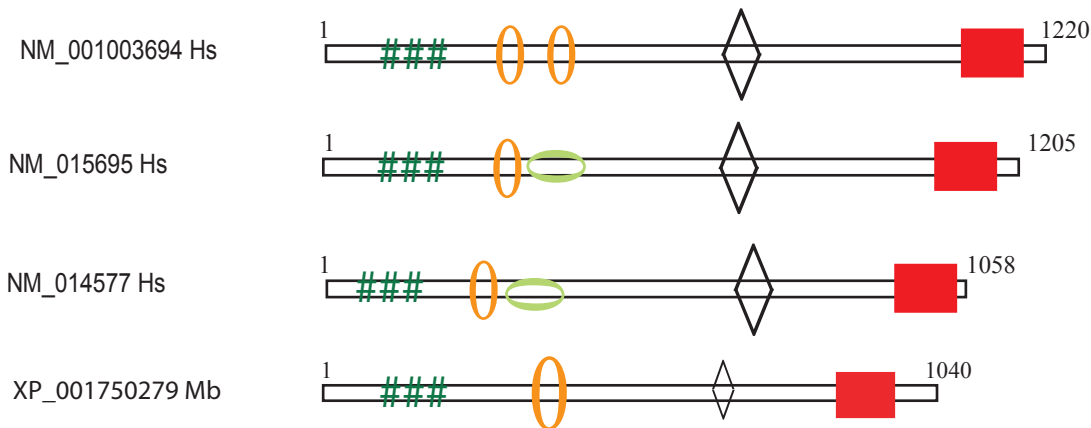
-The ATX3 family



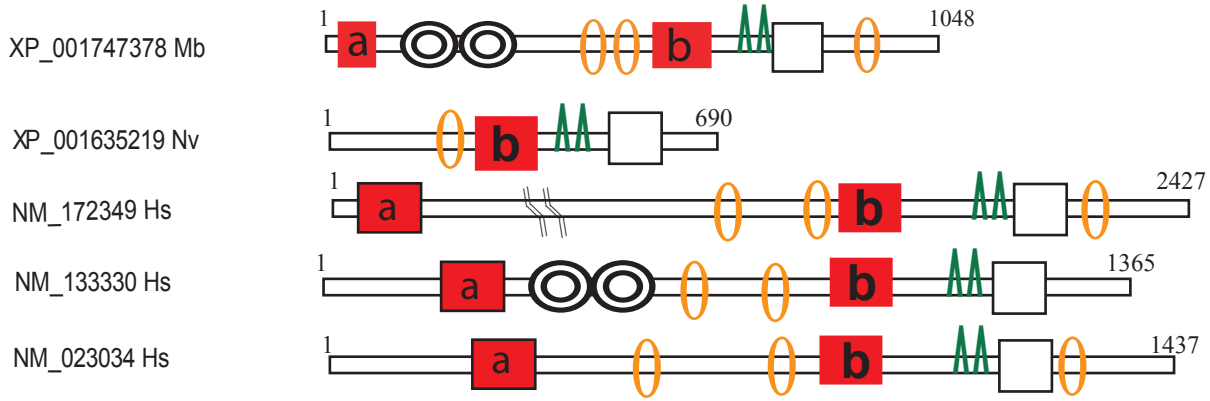
-The ATX1 family



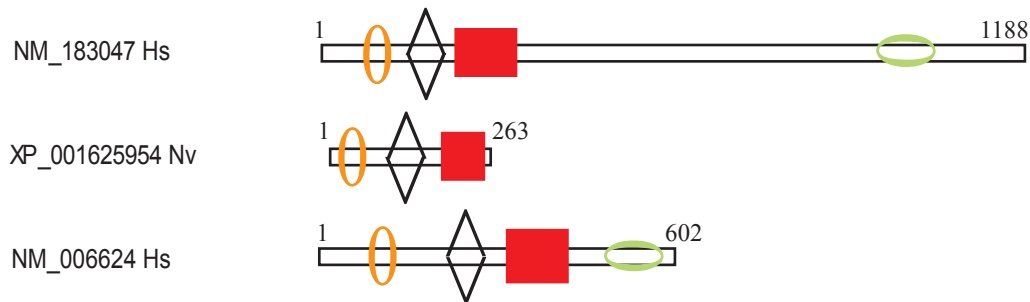
-The Peregrin-type or Brefeldin family



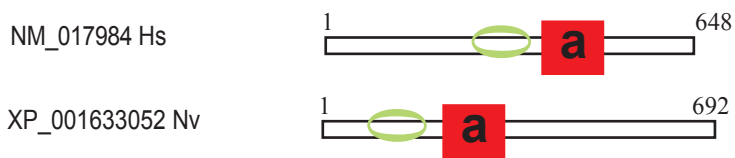
-The WHSC family



-The Z/MYND family



-The ZCWPW1 family



-The DNA methyltransferases

