

Table. S4 sHSP gene family in *Solanum lycopersicum* and subcellular localization. sHSP gene clusters (Cluster #) obtained in the phylogenetic tree shown in Figure S1. For each sHSP gene, its protein molecular weight [kDa] deduced from its nucleotide sequence and its amino acid sequence size [#aa] are indicated. Additionally, their correspondent sub-cellular localization and major clades are also indicated. Subcellular localization was obtained using data previously reported in the literature (Bondino et al., 2012) whenever possible. Otherwise, it was predicted using the TargetP program (<http://www.cbs.dtu.dk/services/TargetP/>). Subcellular localizations are: CI - Class I cytosolic; CII - Class II cytosolic, CIII - Class III cytosolic; ER - endoplasmic reticulum; PX - peroxisomal; MT - mitochondrial; CP - chloroplastic; UAPI - *undefined*. The methodology used to define subcellular localization is shown between brackets: PE - confirmed by previous experiments; TgtP - predicted by the TargetP program; PhyP - predicted by the Phylogeny-based annotation.

<i>Cluster #</i>	<i>Gene</i>	<i>Prot. Mol. Weight/Size</i>	<i>Subcellular Localization</i>	<i>Major Clades</i>
2	Solyc06g076520	17.735/154	CI (PE; PhyP)	MCI
	Solyc06g076540	17.591/154	CI (PE; PhyP)	
	Solyc06g076560	17.645/154	CI (PE; PhyP)	
	Solyc06g076570	17.632/154	CI (PE; PhyP)	
12	Solyc09g015020	17.662/154	CI (PhyP)	
	Solyc09g015000	15.225/ 134	CI (PhyP)	
3	Solyc08g062340	17.624/158	CII (PE; PhyP)	
		17.335/155		
20	Solyc03g123540	16.145/144	CIII (PhyP)	
1	Solyc11g020330	21.45/190	ER (PE)	
	Solyc01g102960	21.65/189	ER (PE)	
	Solyc03g113930	21.48/188	ER (PE;PhyP)	
17	Solyc04g014480	16.06/145	PX (PE;PhyP)	
21	Solyc02g080410	15.69/ 137	UAPI (PE)	
Unclustered	Solyc02g093600	15.65/136	CI sIII (PE)	
13	Solyc09g011710	24.54/208	Cytosolic/nuclear(TgtP)	
	Solyc10g086680	27.1/234		
14	Solyc08g078710	21.54/196	MTII (PhyP)	MCII
	Solyc08g078720	18.23/168	MTII (PhyP)	
	Solyc08g078700	23.84/210	MTII (PE; PhyP)	
16	Solyc12g042830	8.96/79	MTI (PE; PhyP)	
18	Solyc07g064020	21.57/188	Cytosolic/nuclear (PhyP)	

15	Solyc03g082420 Solyc05g014280	26.23/ 235 25.728/221	CP (PE; PhyP) CP (PE; PhyP)	
9	Solyc01g009200 Solyc01g009220 Solyc09g007140 Solyc11g071560	25.73/232 23.83/ 213 26.79/ 236 27.55/ 247	Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP)	MCIII
7	Solyc04g082720 Solyc04g082740 Solyc01g098790 Solyc01g098810	16.72/153 21.63/197 54.05/ 487 24.57/230	Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP) Cytosolic/nuclear (TgtP)	MCIV
Unclustered	Solyc04g072250	17.93/ 163	Cl (PhyP)	-