

**Supplementary Table 2** Species, genes, locus, names, accession numbers and references used in the HAP3 phylogeny.

Species	other name	Accession # / loci	Reference
<i>Homo sapiens</i>	HsNFYB	NM_006166	<a href="http://www.ncbi.nlm.nih.gov/">http://www.ncbi.nlm.nih.gov/</a>
<i>Rattus norvegicus</i>	RnNFYB	NM_031553	<a href="http://www.ncbi.nlm.nih.gov/">http://www.ncbi.nlm.nih.gov/</a>
<i>Zea mays</i>	ZmLEC1	AF410176	Shen et al 2010
<i>Zea mays</i>	ZmNFB6	EU976517.1	Alexandrov et al 2009
<i>Oryza sativa</i>	OsLEC1B	Os02g0725700, AY062184.1	Xia et al. 2008
<i>Oryza sativa</i>	OsLEC1	Os06g0285200, AY264284	Xia et al. 2008
<i>Arabidopsis thaliana</i>	AtLEC1	AT1G21970.1, NM_102046	Lee et al 2003
<i>Arabidopsis thaliana</i>	AtL1L	AT5G47670.1, NM_124141	Kwong et al 2003
<i>Arabidopsis thaliana</i>		AT4G14540.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT2G13570.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT1G09030.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT2G47810.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT5G47640.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT2G38880.2	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT2G37060.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Arabidopsis thaliana</i>		AT3G53340.1	<a href="http://www.arabidopsis.org/">http://www.arabidopsis.org/</a>
<i>Pinus taeda</i>	PtHAP3A	PUT-157a-Pinus_taeda-68442	<a href="http://www.plantgdb.org/">http://www.plantgdb.org/</a>
<i>Pinus taeda</i>	PtHAP3B	AW981720	<a href="http://www.ncbi.nlm.nih.gov/">http://www.ncbi.nlm.nih.gov/</a>
<i>Pinus taeda</i>	PtHAPx	PUT-157a-Pinus_taeda-81582554	<a href="http://www.plantgdb.org/">http://www.plantgdb.org/</a>
<i>Pinus sylvestris</i>	PsHAP3A	JF280794	This work
<i>Pinus sylvestris</i>	PsHAP3B	partial sequence	This work
<i>Picea abies</i>	PaHAP3A	JF280795	This work
<i>Picea abies</i>	PaHAP3B	partial sequence	This work
<i>Picea abies</i>	PaHAP3x	PUT-175a-Picea_abies-4645	<a href="http://www.plantgdb.org/">http://www.plantgdb.org/</a>
<i>Adiantum capillus-veneris</i>	AcLEC1	EF108291	Xia et al. 2008
<i>Selaginella moellendorffii</i>	SmLEC1	EU019906, BK005972	Xia et al. 2008
<i>Selaginella davidii</i>	SdLEC1	EF108295	Xia et al. 2008
<i>Selaginella sinensis</i>	SsLEC1	EF108296	Xia et al. 2008