

**Table S3.** Information about NCED protein sequences used for phylogenetic analysis.

Species	Protein name	Accession NCBI
<i>Arabidopsis thaliana</i>	AtNCED2	NP_193569.1
<i>Arabidopsis thaliana</i>	AtNCED3	NP_188062.1
<i>Arabidopsis thaliana</i>	AtNCED5	NP_174302.1
<i>Arabidopsis thaliana</i>	AtNCED6	NP_189064.1
<i>Arabidopsis thaliana</i>	AtNCED9	NP_177960.1
<i>Arabidopsis lyrata</i>	AlNCED2	XP_002870052.2
<i>Arabidopsis lyrata</i>	AlNCED3	XP_002885045.1
<i>Arabidopsis lyrata</i>	AlNCED4	XP_002869997.1
<i>Arabidopsis lyrata</i>	AlNCED6	XP_002885610.1
<i>Arabidopsis lyrata</i>	AlNCED9	XP_002862994.1
<i>Brassica napus</i>	BnNCED3	NP_001302902.1
<i>Capsella rubella</i>	CarNCED2	XP_006282855.1
<i>Camelina sativa</i>	CasNCED6	ADE80897.1
<i>Chorispora bungeana</i>	CbNCED1	AAS68632.2
<i>Citrus clementina</i>	CcNCED3_1	XP_006442236.1
<i>Citrus clementina</i>	CcNCED5	XP_006449708.1
<i>Citrus clementina</i>	CcNCED6	XP_006420602.2
<i>Citrus sinensis</i>	CisNCED6	XP_006489810.2
<i>Cryptomeria japonica</i>	CjNCED	BAF31898.1
<i>Caragana korshinskii</i>	CkNCED1	ACU86971.1
<i>Chrysanthemum x morifolium</i>	CmNCED3a	BAF36657.2
<i>Coffea canephora</i>	CocNCED3	ABA43901.1
<i>Cuscuta reflexa</i>	CrNCED1	AAY82458.1

<i>Cuscuta reflexa</i>	CrNCED2	AAV82459.1
<i>Capsella rubella</i>	CrNCED3	XP_006297265.1
<i>Capsella rubella</i>	CrNCED5	XP_006307061.1
<i>Capsella rubella</i>	CrNCED6	XP_006300091.1
<i>Capsella rubella</i>	CrNCED9	XP_006302015.2
<i>Citrus sinensis</i>	CsNCED3	AER70359.1
<i>Cucumis sativus</i>	CsNCED6	XP_004150345.1
<i>Daucus carota</i>	DcNCED1	NP_001316102.1
<i>Daucus carota</i>	DcNCED2	NP_001316098.1
<i>Daucus carota</i>	DcNCED3	NP_001316101.1
<i>Dianthus caryophyllus</i>	DicNCED1	BAN15738.1
<i>Eutrema salsugineum</i>	EsNCED3	XP_006407071.1
<i>Eutrema salsugineum</i>	EsNCED5	XP_006415513.1
<i>Eutrema salsugineum</i>	EsNCED6	XP_006418817.2
<i>Eutrema salsugineum</i>	EsNCED9	XP_006389988.2
<i>Fragaria x ananassa</i>	FaNCED1	ADU85829.1
<i>Gossypium hirsutum</i>	GhNCED1	ADG03462.1
<i>Gentiana lutea</i>	GINCED1	AAS47838.1
<i>Glycine max</i>	GmNCED1	NP_001241616.2
<i>Ipomoea nil</i>	InNCED1	XP_019159612.1
<i>Lactuca serriola</i>	LasNCED4	AFA36207.1
<i>Lycium barbarum</i>	LbNCED2	AFO85470.1
<i>Lilium formosanum</i>	LfNCED3	ACX33872.1
<i>Lactuca sativa</i>	LsNCED1	XP_023732975.1
<i>Lactuca sativa</i>	LsNCED2	BAE72091.1

<i>Lactuca sativa</i>	LsNCED3	BAE72092.1
<i>Lactuca sativa</i>	LsNCED4	BAE72093.1
<i>Malus domestica</i>	MdNCED1	AGQ03804.1
<i>Narcissus tazetta</i>	NtNCED3	AGT28471.1
<i>Nicotiana tabacum</i>	NitNCED3	NP_001313039.1
<i>Pisum sativum</i>	PsNCED2	BAC10550.1
<i>Populus trichocarpa</i>	PtNCED2	XP_002316871.1
<i>Populus trichocarpa</i>	PtNCED3	XP_006370181.1
<i>Populus trichocarpa</i>	PtNCED6	XP_002304701.2
<i>Ricinus communis</i>	RcNCED3	EEF32866.1
<i>Ricinus communis</i>	RcNCED5	EEF42638.1
<i>Ricinus communis</i>	RcNCED6	EEF44272.1
<i>Ricinus communis</i>	RcNCED9	EEF32866.1
<i>Raphanus sativus</i>	RsNCED1	BAF42336.1
<i>Scutellaria baicalensis</i>	SnNCED2	AGN03861.1
<i>Solanum tuberosum</i>	StNCED6	XP_006349526.1
<i>Solanum lycopersicum</i>	SlNCED6	XP_010321597.1
<i>Solanum tuberosum</i>	StNCED1	NP_001275103.1
<i>Solanum tuberosum</i>	StNCED2	NP_001274963.1
<i>Vitis vinifera</i>	VvNCED1	AAR11193.1
<i>Vitis vinifera</i>	VvNCED2	NP_001268200.1
<i>Vitis vinifera</i>	VvNCED6	XP_002283185.1
<i>Physcomitrium patens</i>	PpNCED4	XP_024365588.1
<i>Physcomitrium patens</i>	PpNCED3	XP_024397835.1
<i>Arachis hypogaea</i>	AhNCED1	CAE00459.2

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