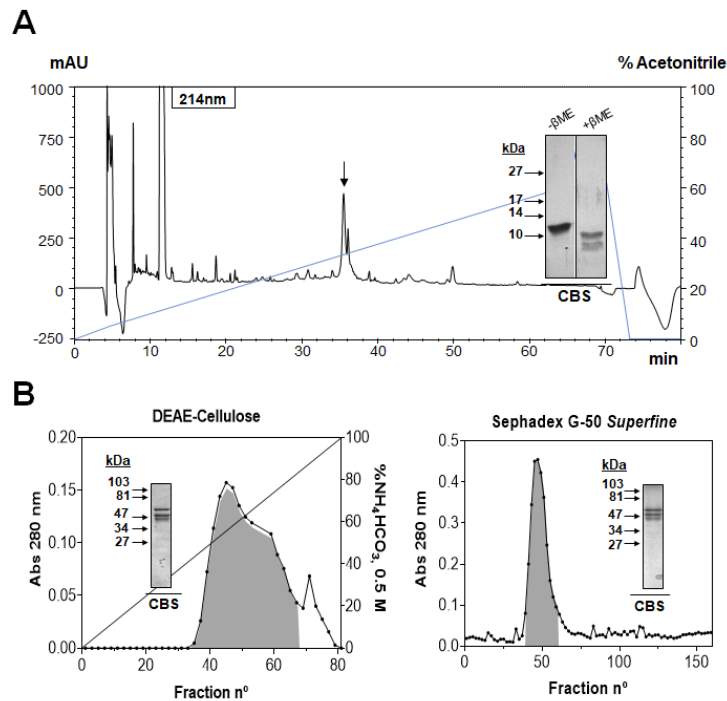


Supplementary material

Figure 1. Isolation of flaxseed 2S albumin and 11S globulin.



- (A) Last chromatographic step, RP-HPLC, for the isolation of the flaxseed 2S albumin.
- (B) Two chromatographic steps for the flaxseed 11S globulin isolation. Inserts show the CBS of both proteins.

Figure 2 Supplementary. Sequence alignment of Lin u 1 with 2S albumins from several plant sources.

```

Lin: svr---*---20---*---40---*---60---*---GRSHYnqg- : 62
Sin: pagpf---RIPKCRKEFQAQHLRACQQLHKQAMQS---Gsgpswtldd : 44
Ses: ttYTTTtTTTAIDDEAN---QSQQCRCQLGRQFRSCQRLSQ---GRSPYGG- : 48
Ara: r-----QQWE-----LQDRRRCQSLERANLRPCQHLMOKIORdedSYE-RDPYSP- : 46
Ana: siyraivE-----VEEDS-----GREQSCRCQFEQQRFRNCQRLVKQEVORG---GR----- : 45
Cor: --FRTTITTVDVDEDiVNQGG---RRGESCRECAQRCQNLNQCQRLVMRQSQSYG--SYDGS- : 54
Pin: he-----D-----IVMDG---DQVVQQQGRSCDPQRLSARDLILOR----- : 33
                                         C 6

Lin: -----80---*---100---*---120---*---140--- : 104
Sin: efdFEDDMENP--QGPOQRPLLQCCCNLHQE--EPICVCPILKGASKAVKQQVRQQLGQ- : 101
Ses: --EEDVLEMS--TGNQSESLRDCQQLGNV--DEHRCCEAIROAVRQCCQEGGYQEG- : 102
Ara: --SQDpyspspydRRGAGSSCHOERCCNLNefenNORCMCEALQILNQSDDLQ- : 100
Ana: -----YNQRCBSLRECCCNLQEV--DRRCRCNLRCQRLQQLQEQEQ---I----- : 85
Cor: -----NQOQCELECCCNLROM--DEHRCCEGLROAVMCOQGEHR- : 93
Pin: -----RRRCPSERCCCNLORM--SPHRCRAIRALDQSQSYDsstdsdqdgaplnqrr : 86
                                         CC L C C 6

Lin: -----*---160---*---180---*---200---*--- : 145
Sin: QECGq-EVQRWIOCA-KLIAKDLBGCRRT-QESQ-CQFQG-----QQQSA- : 145
Ses: QECGpHLQHVISRT-YETATLHKVONT-RQSVCPFKKTmpggs- : 132
Ara: C-----SCCV-YERARDLRRCNV-RBQQ-CQFRvifv- : 157
Ana: KEE- QECGfKRELRNLBQCCGLRAPQR-CLDvesggrprrippiltgsrsRRHqspyg : 118
Cor: KEE- VREL-YETASELERICSIL-SPSQCCQFQSSy- : 125
Pin: rrrgegrER-EEFA-VERVEELNRCNL-RESP-RRCDI-----RRHSR- : 127
                                         g 2 a LP C c

Lin: -----220---*---240--- : 147
Sin: ----- : -
Ses: ----- : -
Ara: nrrysamcllpraadgdgWFpsvavdcsg : 186
Ana: ----- : -
Cor: ----- : -
Pin: -----Ysiigsd- : 135

```

%I \ %S	Lin u 1	Sin a 1	Ses i 1	Ara h 2	Ana o 3	Cor a 14	Pin p 1	
Lin u 1	100	0	34	37	29	48	45	31
Sin a 1	19	100	0	38	24	41	33	23
Ses i 1	25	20	100	0	27	46	46	28
Ara h 2	16	10	16	100	0	25	28	20
Ana o 3	24	19	29	12	100	0	58	34
Cor a 14	26	18	32	15	36	100	0	31
Pin p 1	13	11	15	12	18	16	100	0

Signal peptides from each protein, determined with online program SignalP, were removed. Table under alignment shows percentages of identity (%I, dark grey) and similarity (%S, light grey) between the different proteins. Nomenclature: Lin, conlinin; Sin, Sin a 1; Ses, Ses i 1; Ara, Ara h 2; Ana, Ana o 3; Cor, Cor a 14; Pin, Pin p 1.