

Supplementary Table 1:

Peptide-No.	Sequence
Peptides specific for the long variant of SYCP3	
1	MLRGCGEVGAV
2	DCSPEQLNKHLKMVPGGRKHSGKSGKPPLI
Peptides specific for the short variant of SYCP3	
3	MVPGGRKHSGKSGKPPLI
Peptides shared in both variants of SYCP3	
4	DQPKKAF
5	DFEKE
6	DK
7	DLSGSEE
8	DAV
9	DEKTQVF
10	DKHGKRSAGIIE
11	DVGGEVQNMLEKFGA
12	DINKALLAKKKRIEMYTKASFKASNQKIEQIWKTQQEEIQKLNNEYSQQFLSVLQQWEL
13	DMQKFEEQGEKLTNLFRRQQKIFQQTRIVQSQRMKAIKQLHEQFIKSLE
14	DVEKNN
15	DNLFTGTQSELKKEMAMLQKKVMMETQQQEMANVRKSLQSMLF

Supplementary table 1 lists all peptides theoretically generated by digestion of the two SYCP3 variants with Asp-N endopeptidase. Not included are peptide sequences due to missed cleavages.

Supplementary table 2:

Variant	Identified peptides	Modification(s)	Comment	Mascot-Score	SC	PEP
short	MVPGGRKHSGKSGKPPLI	Ac, Ox(M)	peptide 3	134,03	24%	1.72E ⁻²¹
	MVPGGRKHSGKSGKPPLI	Ac	peptide 3			
	DQPKKAF	unmodified	peptide 4			
	DQPKKAFDFEKE	unmodified	peptide 4/5			
	DAVDEKTQVF	unmodified	peptide 8/9			
	DEKTQVF	unmodified	peptide 9			
	DVGGEVQNMLEKFGA	unmodified	peptide 11			
	DVGGEVQNMLEKFGA	Ox(M)	peptide 11			
long	MLRGCGEVGAV	Ac, Ox(M)	peptide 1	235,86	19%	2.40E ⁻²²
	MLRGCGEVGAV	Ac	peptide 1			
	DQPKKAFDFEKE	unmodified	peptide 4/5			
	DAVDEKTQVF	unmodified	peptide 8/9			
	DEKTQVF	unmodified	peptide 9			
	DVGGEVQNMLEKFGA	Ox(M)	peptide 11			

Supplementary table 2 lists the peptides that lead to identification of SYCP3 in the 2 samples. If a peptide was found with modifications these are listed in the corresponding column (Ac = acetylation of protein N-terminus, Ox(M) = oxidation of methionine). The peptide number given as a comment corresponds to peptide number listed in supplementary table 1. Combinations of peptides given in the comment column are due to missed cleavages. SC describes the sequence coverage of the protein by the identified peptide sequences. PEP (posterior error probability) is a measure for the probability of a false hit [Käll et al., 2008]. Mascot score, sequence coverage, and PEP are protein-related values.

References (supplement):

Käll L, Storey JD, MacCross MJ, Noble WS: Posterior error probabilities and false discovery rates: two sides of the same coin. *J Proteome Res* 7:40--44 (2007).