Figure S1

Λ

| | pep | otide | e 1 | | | | | | | |
|-----------------------------------|------|-------|-----|-----|------|-------------------------|------|------|-----|----|
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 | 8 | | 9 |
| LLIAGIIAMICYRKKRKGKLTLEDOATFIKKGV | | | | | | | | | | |
| | | | 1 | 2 | | 3 | 4 | 5 | 6 | |
| | 10 | 11 | 12 | 13 | 1 | 4 | 15 | 16 | 17 | |
| ΡI | IFAD | ELDE | SKP | PPS | SSM | PLI | LOEE | KAP | LPP | Р |
| | 7 | 8 | 9 | 10 | 11 | 1 | 12 | 13 | 14 | |
| | 18 | 19 | 20 | 21 | 22 | 2 | 23 | 24 | 25 | |
| ΕY | PNQS | SVPET | TPL | NQD | TMGI | EYTI | PLRD | EDPI | NAP | Р |
| 15 | 5 16 | 5 17 | / 1 | 18 | 19 | 20 | 21 | . 2 | 2 | |
| 26 | 5 27 | 7 28 | 8 2 | 29 | 30 | 31 | | | | |
| YQPPPPFTVPMEGKGSRPKNMTPYRSPPPYVPP | | | | | | | | | | |
| 23 | 24 | 25 | 26 | 5 | 27 | 28 | 29 | 30 | | 31 |
| | | | | | | I | pept | ide | 31 | |
| | | | | | | | | | | |
| B C | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | $\overline{\mathbf{G}}$ |) |) | 2 | |



Figure S1 Identification of β -dystroglycan peptides which interact with monoclonal 43DAG/8D5. A, Scheme for the synthesis of peptides on the 'SPOTs' membrane. Twelve amino acid long peptides representing part of the transmembrane region and the entire cytoplasmic domain of human β -dystroglycan (amino acids 764-895) were synthesised on derivatised 'SPOTs' membranes with an offset of four amino acids. Numbers above the β -dystroglycan sequence denote the first amino acid of the peptide found on the corresponding spot whilst numbers below the sequence denote the last amino acid of the peptide on the corresponding spot. Underlines identify the sequences of spots 1 and 31.

Spot 32 is a negative control with no peptide synthesised. B, The β -dystroglycan cytoplasmic domain 'SPOTs' membrane was probed with monoclonal antibody 43DAG/8D5 and detected by ECL as described previously (James et al., 2000). The antibody recognised spot 31 only, which contains the unique peptide sequence YVPP and is the only SPOT that contains the entire sequence of the WW domain binding motif PPPY. An identical result has been found for another β -dystroglycan monoclonal antibody MANDAG2 (James et al., 2000). C, Numbered circles identify the location of each peptide spot on the membrane.

Reference

James, M., Nuttall, A., Ilsley, J. L., Ottersbach, K., Tinsley, J. N., Sudol, M. and Winder, S. J. (2000). Adhesion-dependent tyrosine phosphorylation of β -dystroglycan regulates its interaction with utrophin. *J. Cell Sci.* **113**, 1717-1726.