

Supporting Information

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Nedd8 Hs MLIKVKTLTGKEIEIDIEPTDKVERIKERVEEKEGIPPQQRLIYSGKQMNDEKTAADYK 60
Nedd8 Mm MLIKVKTLTGKEIEIDIEPTDKVERIKERVEEKEGIPPQQRLIYSGKQMNDEKTAADYK 60
Nedd8 Dm MLIKVKTLTGKEIEIDIEPTDKVDRIKERVEEKEGIPPQQRLIFSGKQMNDDKTAADYK 60
Nedd8 Bt MLIKVKTLTGKEIEIDIEPTDKVERIKERVEEKEGIPPQQRLIYSGKQMNDEKTAADYK 60
Rub1 Sc MIVKVKTLTGKEISVELKESDLVYHIKELLEKEGIPPSQQRLLIFQKQIDDKLTVTDAH 60
Ned8 Sp MLIKVKTLTGKEIELDIDPNDKVSRIKERVEEKEGIPPSQQRLLIYAGKQMAADDKNAESYH 60
      *::*****:..... .* * :*** :***** *****: ***: * . . . :

Nedd8 Hs ILGGSVLHLVLALRGGGGLRQ--- 81
Nedd8 Mm ILGGSVLHLVLALRGGGGLGQ--- 81
Nedd8 Dm VQGSVLHLVLALRGGDSILTPCV 84
Nedd8 Bt ILGGSVLHLVLALRGGGGLRQ--- 81
Rub1 Sc LVEGMQLHLVLTLRGGN----- 77
Ned8 Sp LEGGSVLHLVLALRGGSC----- 78
      : * *****:*****
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Figure S1 *Nedd8* is a phylogenetically conserved ubiquitin-like modifier

Nedd8 from the indicated species were aligned using the ClustalW program. Similar (:) and identical (*) residues have been marked. Note that the mature C-terminal GG motif (arrow) is completely conserved.

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Yuh1 Sc MSGENRAVPIESNPEVFTNFAHKLGLKNEWAYFDIYSLTEPELLAFLPRPVKAIVLLFP 60
Uch1 Sp -----MWRPLENTPEVLEPYLQKIGVQ-DASVDFLFSLEE--IPEYIPRPVHALLFVFP 51
      *:*.***: : :*:*: : : :*:** * : :*:***:*****

Yuh1 Sc INEDRKSSTSQQITS--SYDVIWFKQSVKNACGLYAILHSLSNNQSLLEPGSDLDNFLKS 118
Uch1 Sp SSGTKTIYKGSRI LPKDSDKVLWYPQTIPNACGTIGLLHAVSNGE--LRRKVNENDFIKS 109
      . :. ....* . * .*:*: *:: ***** .:***:***: * . : :*:**

Yuh1 Sc QSDTS--SSKNRFDDVTTDQFVLNVIKENVQTFSTGQSEAPEATADTNLHYITYVE---- 172
Uch1 Sp LIRTAEGSSIEERAKLIEDSKELEALHAAFAG-PPLEVEGSEEDVETDLHFICFVKGKSK 168
      *: ** :. :. * .*:*: . . . : *..* .:***:***: **:

Yuh1 Sc ENGGIFELDGRNLSGPLYLKSDPTATDLIEQELVRVRVASYMEN-ANEEDVLNFMAMLGL 231
Uch1 Sp DDNHFYELDGR-----QEGPVQHSEIESDLLNAEVLVSVIKNYIQSIDSPFFSLVAI 219
      :. :*:*** .:*. . .*:*:...* * :*: .: * * :*:*:

Yuh1 Sc GPNWE 236
Uch1 Sp TTP-- 222

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Figure S2 *Uch1* is the fission yeast orthologue of *S. cerevisiae* *Yuh1*

S. cerevisiae (Sc) *Yuh1* and *S. pombe* (Sp) *Uch1* were aligned using the ClustalW program. Similar (:) and identical (*) residues have been marked. Note that the active site cysteine residue (red) is conserved.