

Table S.1. Accession number of sequences used for alignment

Gene	Accession Number
Human	
<i>ITCH</i>	NM_001257137
<i>WWP1</i>	NM_007013
<i>WWP2</i>	NM_007014
<i>NEDL2</i>	NM_020760
<i>NEDL1</i>	NM_015052
<i>NEDD4L</i>	NM_001144967
<i>NEDD4</i>	NM_006154
<i>SMURF2</i>	NM_022739
<i>SMURF1</i>	NM_020429
Zebrafish	
<i>itcha</i>	XM_002667532
<i>itchb</i>	XM_003201654
<i>wwp1</i>	XM_003201365
<i>wwp2</i>	NM_001099448
<i>nedl1</i>	NM_001145764
<i>nedl2a</i>	XM_001922405
<i>nedl2b</i>	XM_003197612
<i>nedd4l</i>	XM_682997
<i>nedd4</i>	NM_001034186
<i>smurf1</i>	NM_001001943
<i>smurf2</i>	NM_001114426
Outgroup	
<i>Monosiga brevicolis</i>	XM_001743996