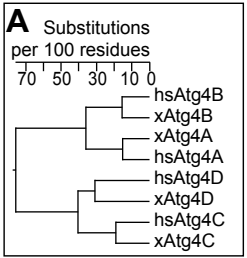

B Atg4B orthologs

```
hsAtg4B   1 MDAATLTYDTLRFAEFEDFPETSEPVWILGRKYSIFTEKDEILSDVASRLWFTYRKNFPAIGGTGPTSDTGWGCMLRCGQ 80
xAtg4B    1 MDAATLTYDTLRFADTPDFPETAEPVWVLGRKYSALTEKEQLLNDITSRLWFTYRRNFQAIGGTGPTSDTGWGCMLRCGQ 80

hsAtg4B  81 MIFAQALVCRHLGRDWRWTQRKRQPDSYFSVLNAFIDRKDSYYSIHQIAQMGVGEGKSIGQWYGPNTVAQVLKKLAVFDT 160
xAtg4B   81 MIFAQALICRHVGRDWRWDKQKPKGE-YLNILTAFLDKKDSYYSIHQIAQMGVGEGKYIGQWYGPNTVAQVLRKLAVFDQ 159

hsAtg4B 161 WSSLAVHIAMDNTVVMEEIRRLCRTSVPCAGATAFPADSDRHCNGFPAGAEVTNRPSPWRPLVLLIPLRLGLTDINEAYV 240
xAtg4B  160 WSSIAVHIAMDNTVVVDEIRRLCR------AGSGESSDAGALSNGYTGDSDPS--CAQWKPLVLLIPLRLGLSEINEAYI 231

hsAtg4B 241 ETLKHCFMMPQSLGVIGGKPNSAHYFIGYVGEELIYLDPHTTQPAVEPTDGCFIPDESFHCQHPPCRMSIAELDPSIAVG 320
xAtg4B  232 ETLKHCFMVPQSLGVIGGRPNSAHYFIGYVGDELIYLDPHTTQLSVEPSDCSFIEDESFHCQHPPCRMHVSEIDPSIAVG 311

hsAtg4B 321 FFCKTEDDFNDWCQQVKKLSLLGGALPMFELVELQPSHLACPDVLNLSLDSSDVERLERFFDSEDEDFEILSL 393
xAtg4B  312 FFCSSQEDFEDWCQHIKKLSLSGGALPMFEVVDQLPLHLSNPDVLNLTPDSSDADRLDRFFDSEDEEFEILSL 384
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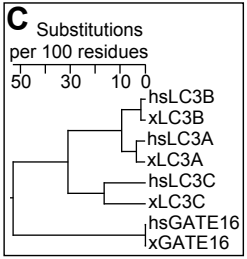

D LC3B orthologs

```
hsLC3B   1 MPSEKTFKQRRSFEQRVEDVRLIREQHPTKIPVIIERYKGEKQLPVLDKTKFLVPDHVNMSELIKIIRRRLQLNANQAFF 80
xLC3B    1 MPSEKTFKQRRSLEQRVEDVRLIREQHPTKIPVIIERYKGEKQLPVLDKTKFLVPDHVNMSELIKIIRRRLQLNSNQAFF 80

hsLC3B  81 LLVNGHSMVSVSTPISEVYESERDEDGFLYMVYASQETFG 120
xLC3B   81 LLVNGHSMVSVSTPISEVYEREKDEDGFLYMVYASQETFG 120
```

E GATE16 orthologs

```
hsGATE16   1 MKWMFKEDHSLEHRCVESAKIRAKYPDRVPVIVEKVSGSQIVDIDKRKYLVPSDITVAQFMWIIRKRIQLPSEKAIFLFV 80
xGATE16    1 MKWMFKEDHSLEHRCVESAKIRAKYPDRVPVIVEKVSGSQIVDIDKRKYLVPSDITVAQFMWIIRKRIQLPSEKAIFLFV 80

hsGATE16  81 DKTVPQSSLTMGQLYEKEKDEDGFLYVAYSGENTFG 116
xGATE16   81 DKTVPQSSLTMGQLYEKEKDEDGFLYVAYSGENTFG 116
```