

A

Bb_Bmh1	...DDAVYLAKLAEQAERYDEMVENMKIVASEDRDLVDEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.SQVTLKREYRKIEPELAKICEIL
Bb_Bmh2	TTTERESKTHLARTCEQAERYDEMVTYMKFVAKIGGLIVDERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVPTTHDYRKIEPELAKICEIL
Ff_Bmh2	ATERESKTHLARTCEQAERYDEMVTYMKFVAKIGGLIVDERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
*Fs_Bmh2	ATERESKTHLARTCEQAERYDEMVTYMKFVAKIGGLIVDERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
Fg_Bmh2	ATERESKTHLARTCEQAERYDEMVTYMKFVAKIGGLIVDERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
Fo_Bmh2	...FLARTCEQAERYDEMVTYMKFVAKIGGLIVDERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
Sc_Bmh1	STSRSDSVYLAKLAEQAERYDEMVENMKIVASSGQDISVEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
Sc_Bmh2	SQTRSDSVYLAKLAEQAERYDEMVENMKIVASSGQDISVEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.KHVSTTHDYRKIEPELAKICEIL
Fg_Bmh1	...EDAVYLAKLAEQAERYDEMVENMKIVASEDRDLVDEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.SQVTLKREYRKIEPELAKICEIL
Ff_Bmh1	...EDAVYLAKLAEQAERYDEMVENMKIVASEDRDLVDEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.SQVTLKREYRKIEPELAKICEIL
Fo_Bmh1	...EDAVYLAKLAEQAERYDEMVENMKIVASEDRDLVDEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.SQVTLKREYRKIEPELAKICEIL
*Fs_Bmh1	...EDAVYLAKLAEQAERYDEMVENMKIVASEDRDLVDEERNLLSVAYNVIGARRASWRIVTSIEQKEESKNS.SQVTLKREYRKIEPELAKICEIL
Bb_Bmh1	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Bb_Bmh2	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Ff_Bmh2	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
*Fs_Bmh2	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Fg_Bmh2	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Fo_Bmh2	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Sc_Bmh1	SVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Sc_Bmh2	SVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Fg_Bmh1	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Ff_Bmh1	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Fo_Bmh1	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
*Fs_Bmh1	IVLLESLIENSAITGESKVFYKMKGDYHRYLAEEFASGERRKGAATAADAYKSAITDVAQTELEFTHPIRLGLALNFSVFYYETINSPDRACHLAKQADDAI
Bb_Bmh1	AGKPSAMTSAQIVHPTDVLTELDLSEESYKSDSTLIMQLLRDNLWTWSSAEATAPAAEGASKEEFVAAEEFPKAEKPAA.....
Bb_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDTAAEAPS..ADAPKKD.....
Ff_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDSAEGEAAGAADAPKKEE.....
*Fs_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDSAEGEAAGAADAPKKEE.....
Fg_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDS.....
Fo_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDS.....
Sc_Bmh1	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDSAEGEAAGAADAPKKEE.....
Sc_Bmh2	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSDSAEGEAAGAADAPKKEE.....
Fg_Bmh1	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSAEATSAAGQAEAPK.....
Ff_Bmh1	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSAEATSAAGQAEAPKED.....
Fo_Bmh1	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSAEATSAAGQAEAPKED.....
*Fs_Bmh1	A.....ELDSLSEESYKSDSTLIMQLLRDNLWTWSSAEATSAAGQAEAPKED.....

B

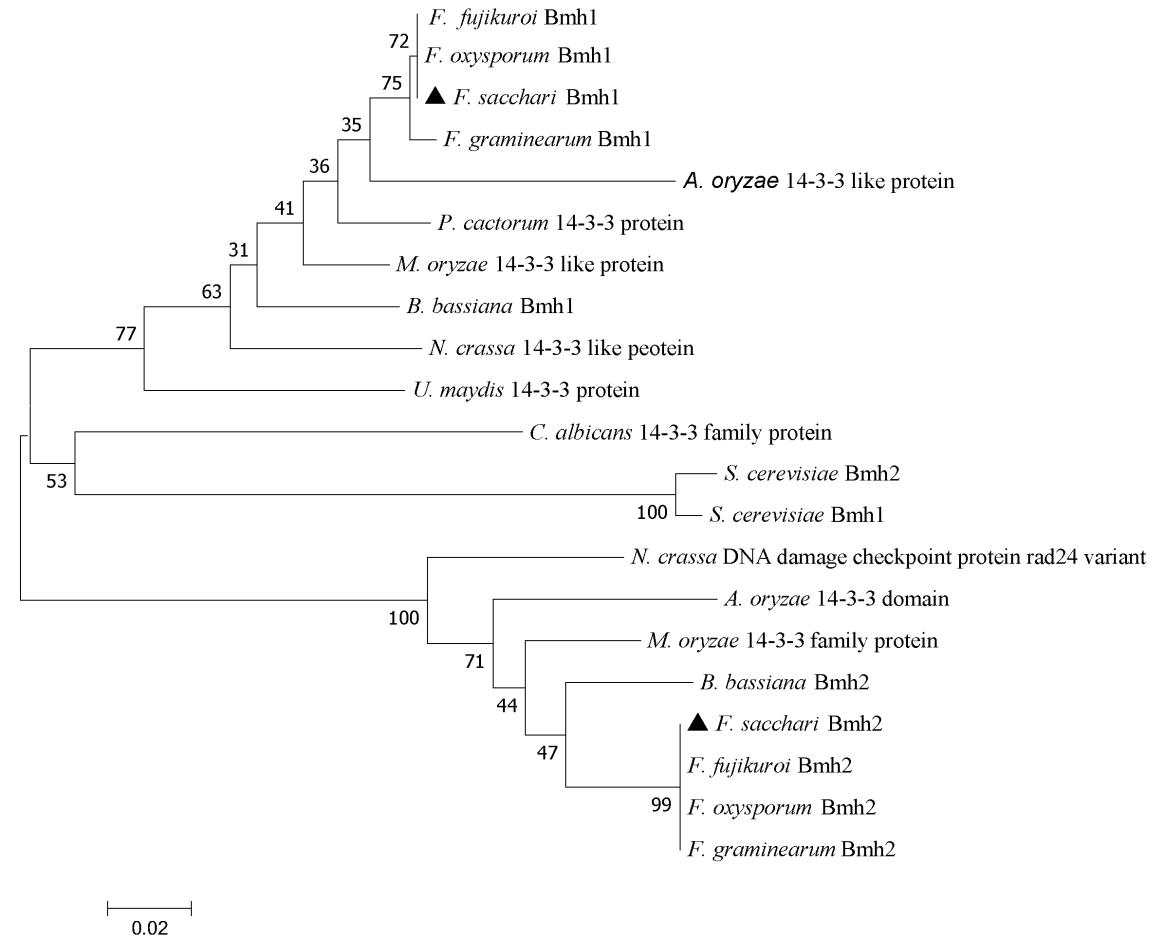


Figure S1. Sequence alignments and analysis of the phylogenetic relationships among 14-3-3 and its homologs. (A) sequence alignment of 14-3-3 and its homologs. (B) A neighbor-joining tree was constructed using the amino acid sequence of 14-3-3 proteins from different organisms.