

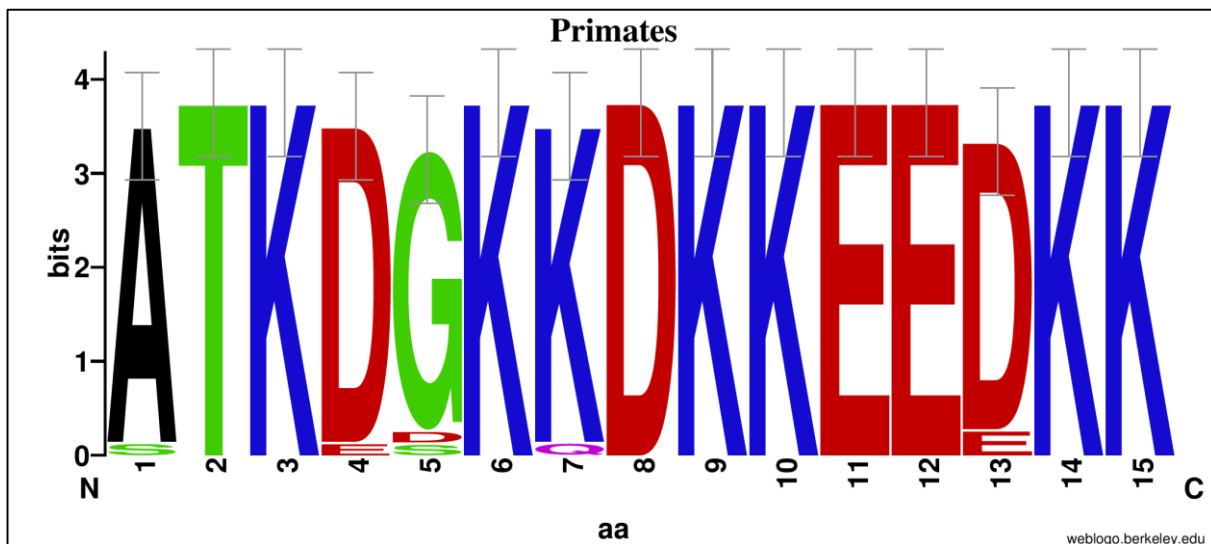
Figure S1. STABILON is conserved through evolution.

Multiple sequence alignments of the very C-terminal sequences of the proteasomal polyubiquitin receptor subunits in primates, other mammals or *Drosophilidae*. Aligned sequences were subjected to WebLogo3 [ref. 32] to generate sequence logos showing the most conserved amino acids of the various potential STABILON sequences.

Primates

CLUSTAL Omega(1.2.4) multiple sequence alignment

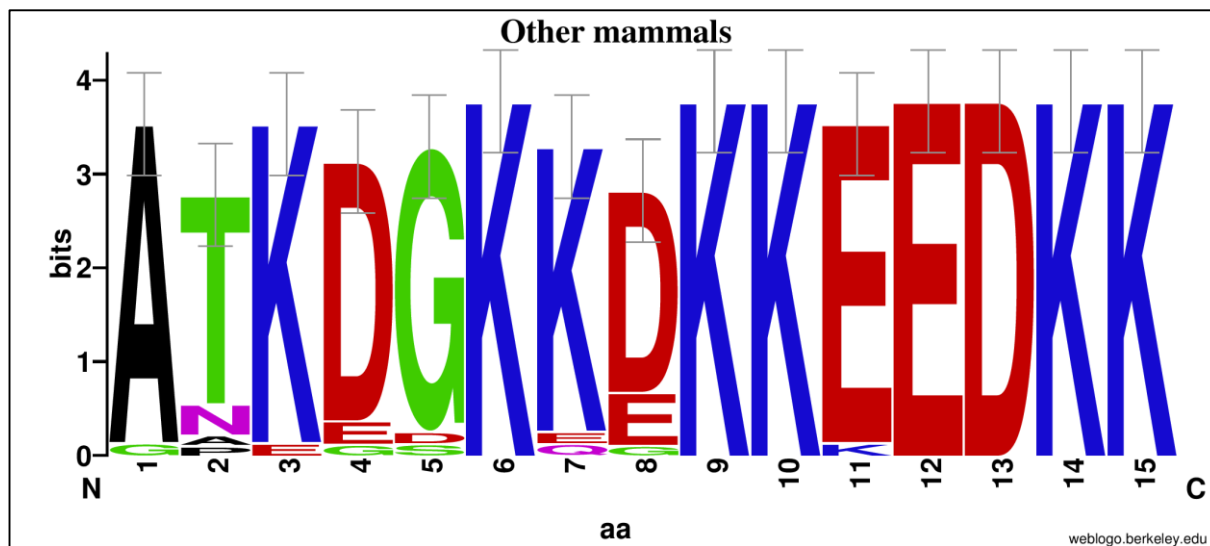
Csyr/Tarsier	STKESKKDKKEEDKK
Ccap/Capuchin	ATKDDKQDKKEEDKK
Ogar/Bushbaby	ATKDGKKDKKEEDKK
Cjac/Marmoset	ATKDGKKDKKEEDKK
Mmul/Macaque	ATKDGKKDKKEEDKK
Hsap/Human	ATKDGKKDKKEEDKK
Caty/Sooty_mangabey	ATKDGKKDKKEEDKK
Capa/Angola_colobus	ATKDGKKDKKEEDKK
Nleu/Gibbon	ATKDGKKDKKEEDKK
Ccap/Capuchin	ATKDGKKDKKEEDKK
Ggor/Gorilla	ATKDGKKDKKEEDKK
Sbbo/Bolivian_squirrel_monk	ATKDGKKDKKEEDKK
Anan/Night_monkey	ATKDGKKDKKEEDKK
Ppan/Bonobo	ATKDGKKDKKEEDKK
Mnem/Pig-tailed	ATKDGKKDKKEEDKK
Mfas/Crab-eating_macaque	ATKDGKKDKKEEDKK
Mleu/Drill	ATKDGKKDKKEEDKKEEEHLA
Rbie/Black_snub-nosed_monk	ATKDGKKDKKEEDKK
Rrox/Golden_snub-nosed_monk	ATKDGKKDKKEEDKK
Panu/Olive_baboon	ATKDGKKDKKEEDKK
Ptro/Chimpanzee	ATKDGKKDKKEEDKK
Ptro/Chimpanzee	ATKDGKKDKKEEDKK
Mmur/Mouse_lemur	ATKDGKKDKKEEEKK
Pcoq/Coquerel's_sifaka	ATKDGKKDKKEEEKK
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Other mammals

CLUSTAL Omega (1.2.4) multiple sequence alignment

Dnov/Armadillo	ATEDGKEGKKKEDKK
Lafr/Elephant	ATKDDKQDKKEEDKK
Mdom/Opossum	AAKGKKKEKKEEDKK
Chof/Sloth	APKDGKKKEKKEEDKK
Sara/Shrew	GTKDGKKDKKEEDKK
Dnov/Armadillo	ATKDSKKDKKEEDKK
Pvam/Megabat	ATKEGKKDKKEEDKK
Sscr/Pig	ATKEGKKDKKEEDKK
Sscr/Pig	ATKDGKKDKKEEDKK
Mluc/Microbat	ATKDGKKKEKKEEDKK
Shar/Tasmanian_devil	ATKDGKKKEKKEEDKK
Neug/Wallaby	ATKDGKKKEKKEEDKK
Amel/Panda	ANKDGKKDKKEEDKK
Mpfu/Ferret	ANKDGKKDKKEEDKK
Fcat/Cat	ANKDGKKDKKEEDKK
Btau/Cow	ATKDGKKDKKEEDKKEEDKK
Ttru/Dolphin	ATKDGKKDKKEEDKK
Tbel/Treeshrew	ATKDGKKDKKEEDKK
Opri/Pika	ATKDGKKDKKEEDKK
Oari/Sheep	ATKDGKKDKKEEDKK
Ocun/Rabbit	ATKDGKKDKKEEDKK
Etel/Lesser_hedgehog_t.	ATKDGKKDKKEEDKK
Eur/Hedgehog	ATKDGKKDKKEEDKK
Vpac/Alpaca	ATKDGKKDKKEEDKK
Pcap/Hyrax	ATKDGKKDKKEEDKK
	. : .*: **:****



Drosophilidae

CLUSTAL O(1.2.4) multiple sequence alignment

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Dobs      KDKDKKN EEDNQKK-
Dser      KDKDKKN DAKDSQEK
Dmir      KDKDKKN EEKDNQKK
Dpse      KDKDKKN EEEKDNQKK
Dper      KDKDKKN DEKDNQKK
Dana      KDKEKKK GDGKDSQKK
Dfic      KDKEKKK GDGKDSQKK
Dbip      KDKEKKK GDGKDSQKK
Dvir      KDKDKKN DKGDEQKK
Dhyd      KDKDKKT DGNDEQKK
Dari      KEKDKKT DKGDEQKK
Dmoj      KDKDKKT DKGDEQKK
Dbia      KDKDKK GEGKDSQKK
Dele      KDKDKK GDGKDSQKK
Drho      KDKDKK GDGKDSQKK
Dyak      KDKDKK GDGKDSQKK
Dere      KDKDKK GDGKDSQKK
Dtak      -DKDKK GDGKDSQKK
Dgri      KDKDKK SDGKDEQKK
Dmel      KDKDKK SDGKDSQKK
Dsec      KDKDKK SDGKDSQKK
Dsim      KDKDKK SDGKDSQKK
Deug      KDKDKKT DKGKDSQKK
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