

Supplementary data

A

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Intron
Human p62      - C C T G T G T G C T C A T G G T G A G T T T T G T T C
Mouse p62 full-length  G C C T G A - T G C T C A C A G C A G G T T G T A T T C
Mouse p62 variant  G C C T G A - T G C T C A C A G C A G G T T G T A T T C

Exon7
Human p62      G A A C A G A T G G A G T C G G A T A A C T G T T C A G G
Mouse p62 full-length  G A A C A G A T G G A G T C G G G A A A C T G C T C A G G
Mouse p62 variant  G A A C A G A T G G A G T C G G G A A A C T G C T C A G G

3' splicing site
Human p62      A G G A G A T G A T G A C T G G A C C C A T C T G T C T T C A A A A G A A G T G G A C C C G T C T A C
Mouse p62 full-length  A G G A G A C G A T G A C T G G A C A C A C A T T T G T C T T C A A A A G A A G T G G A C C C A T C T A C
Mouse p62 variant  A G G A G A C G A T G A C T G G A C A C A C A T T T G T C T T C A A A A G A A G T G G A C C C A T C T A C

5' splicing site
Human p62      A G G T G A A C T
Mouse p62 full-length  A G G T G A A C T
Mouse p62 variant  A G G T G A A C T

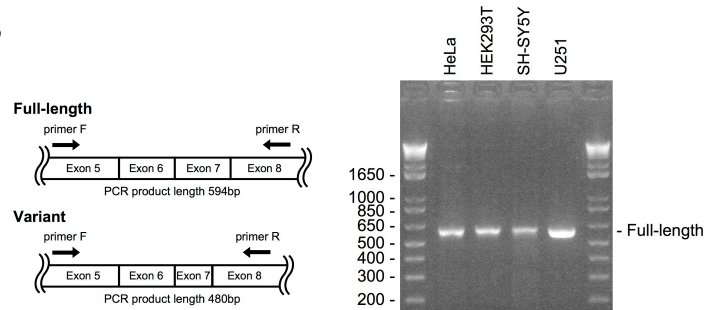
Human p62      C C A G T C C C T A C A G A T G C C A G A A A T C C G A A G G G C C A A G C T C T C T G G A C C C C T C C C A G G A G G G
Mouse p62 full-length  C C A G T C T C T A C A G A T G C C A G A A A T C C G A A G G G C C A A G C T C T C T A G A C C C C T C A C A G G A A G G
Mouse p62 variant  - - - - -

Intron
Human p62      A C C C A C A G G G C T G A A G G A A G C T G C C C T T G T A C C C A C A T C T C C C G C C A G G C A A G T G A A C - C A
Mouse p62 full-length  A C C C A C A G G G C T G A A G G A A G C T G C C C T A T A C C C A C A T C T C C C A C C A G G C A T G T G G T C A C C
Mouse p62 variant  - - - - -

3' splicing site
Human p62      A G A G T T T T G T A C A T A T T
Mouse p62 full-length  A G A A G T T T C A T T T T C C T -
Mouse p62 variant  - - - - -

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B



Supplementary Figure 1

- (A) Alignment of exon 7 and the junction region of human and mouse *p62*. 5' and 3' splicing sites are indicated.
- (B) Reverse-transcriptase (RT)-PCR. Analysis of *p62* exon 7 splicing in HeLa, HEK293T, SH-SY5Y, and U251. Diagrams at left indicate cDNAs encoding full-length and variant *p62*. The positions of primers used in reverse transcriptase (RT)-PCR of *p62* cDNA and the expected size of the PCR products in the presence or absence of the last half of exon 7 are shown. The right panel shows electrophoresis (2% agarose gel) of RT-PCR products from cDNA of HeLa, HEK293T, SH-SY5Y, and U251.

Supplementary Materials and Methods

Reverse-transcriptase PCR

Using the Transcriptor First-Strand cDNA Synthesis Kit (Roche Applied Science, Indianapolis, IN, USA), cDNA was synthesized from 1 µg of total RNA. LA-Taq polymerase (TAKARA BIO.) was used for PCR. The sequences of the primers used were as follows: primer F, GTGGCAGCTGCCCTTAGCCCTC; primer R, TCACAACGGCGGGGGATGCTTTG.