Supplementary Table 1. Sequence of primers used to clone fragments of the 3'UTR of DDB2.

PRIMER POSITION	SEQUENCE[1]
Sense primers	
1	GGAATTCGAGAGACACATAAAGAAGG
91	GGAATTCGGGCCAAAAGTATCCAAGGT
150	GGAATTCGGACTGGGACACTTTTATGTTAATG
200	GGAATTCTCCAGAGTTGGTGACACAGC
Anti-sense primers	
100	CGTCTAGACTTTTGGCCCTTTAACAAATCA
164	CGTCTAGAAAAGTGTCCCAGTCCCACAG
198	CGTCTAGACAGTCTCTGGAGGCAAGTCC
250	CGTCTAGACCAGGCTAGATACAGAGGGG
300	CGTCTAGAACCACCCACTGAGAGGAGAA
343	CGTCTAGACGGTATGGTTTTATTGGCCA
363	CGTCTAGATATCAAAAGAGCACAAATC

[1] The linker sequences are underlined.

Supplementary Table 2. Sequence of primers used to clone short synthetic 3'UTRs from DDB2.

$UTR_{\Delta 162\text{-}174}$	
sense	GGAAUUCGGACUGGGACACCUCUGGACUUGCCUCCAGAGACUGUCUAGACG
antisense	CGUCUAGACAGUCUCUGGAGGCAAGUCCAGAGGUGUCCCAGUCCGAAUUCC
$UTR_{\Delta 175\text{-}194}$	
sense	GGAAUUCGGACUGGGACACUUUUAUGUUAAUGACUGUCUAGACG
antisense	CGUCUAGACAGUCAUUAACAUAAAAGUGUCCCAGUCCGAAUUCC

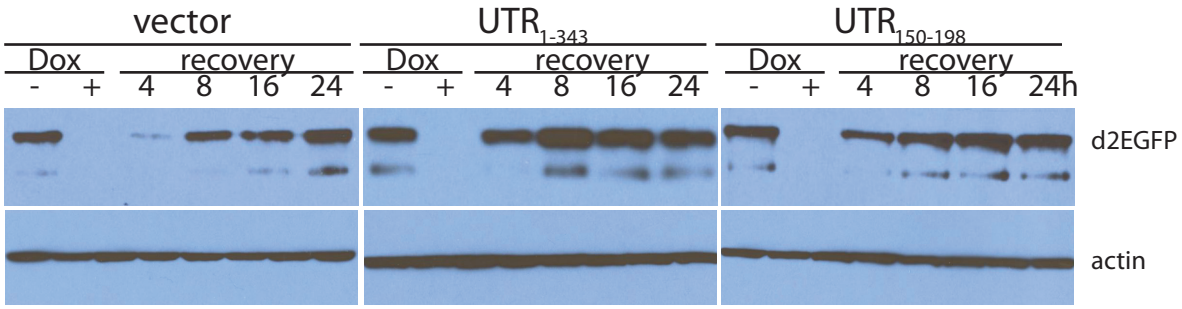
Supplementary table 3. Messenger RNAs with similarity to nucleotides 150-174 from the 3′UTR of DDB2.

RNA	Sequence	Expected	POSITION	S/AS*
DDB2	GGACTGGGACACTTTTATGTTAATG	1E-6	3′UTR	S
ZNF493	ACACTTTTATGTTAAT	.26	3′UTR	S
SS18	GGGACACTTTTATGTT	.26	3′UTR	S
MAK	ACTGGGACACTTTTA	1.0	3′UTR	S
XPNPEP3/DNAJB7**	ACACTTTTATGTTAA	1.0	3′UTR/5′UTR	S/AS
BIRC2***	GGGAaGa-TTTATGTT	1.0	3′UTR	S

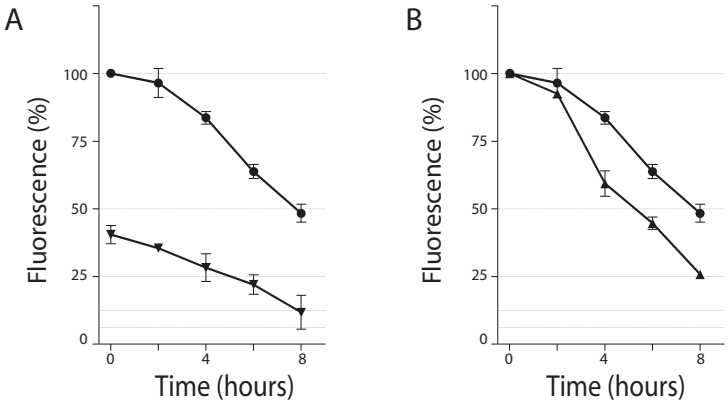
* S indicates that the sequence is in the sense orientation while AS denotes antisense.

** XPNPEP3 and DNAJB7 are expressed from opposite strands of overlapping loci. The sequence indicated above is in the sense strand of the 3′UTR of XPNPEP3 as well as the anti-sense strand of the 5′UTR of DNAJB7.

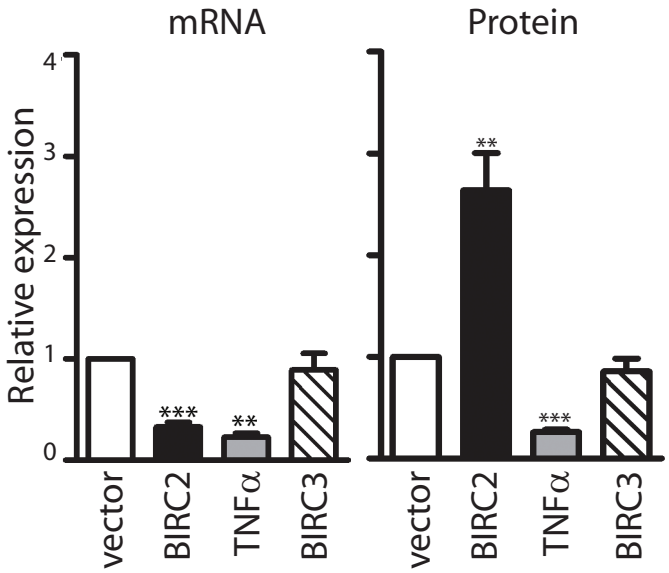
*** Similarity to the nucleotides 127-141 from the 3′UTR of BIRC2 (13 of 16 nt) was recognized visually..



Supplementary Figure 1. The 3'UTR of DDB2 stimulates recovery of reporter gene expression. Stable HeLa Tet-Off®-derived cell lines expressing the indicated reporter constructs were treated with 0.1 ng/mL doxycycline for 2 days to inhibit reporter gene expression (+Dox). Doxycycline was washed out and the cells were replaced with fresh medium for the indicated time in hours (recovery). Cell lysates were collected and analyzed by immunoblot for d2EGFP expression. Actin served as a loading control. Similar results were obtained in 3 independent experiments.



Supplementary Figure 2. The 3'UTR of IL1B decreased expression of a heterologous reporter protein. The 3'UTR of IL1B was cloned downstream of the d2EGFP open reading frame that was under control of a tetracycline-regulated promoter using the pTRE-d2EGFP vector. The 3'UTR was PCR amplified from cDNA using the following primers: CGGAATTCGAGAGCTGTACCCAGAGAGTC and CGGGATCCCTTCAGTGAAGTTTATTTCAG. Stable d2EGFP positive HeLa Tet-Off® cells were generated as described in the Materials and Methods. (A) Fluorescence is expressed as a percent of untreated vector control transfected cells. (B) Fluorescence is expressed as a percent of their respective untreated controls. Each value represents the mean +/- SEM from between 3 and 7 independent experiments.



Supplementary Figure 3. The indicated 3'UTRs were PCR amplified and the products were cloned downstream of a CMV promoter driven chloramphenicol acetyltransferase gene and upstream of the bGH polyadenylation sequence. HEK293 cells were transfected with the indicated vectors and 24 hours later samples were collected for qRT-PCR and ELISA analysis. Transfection efficiency was controlled by determining the ratio of CAT mRNA and protein in each sample to neomycin resistance mRNA and protein, respectively, expressed from the same plasmid. Each value represents the mean (+/- SEM) determined from a minimum of 3 independent experiments. The ** and *** indicate that the mean is not equal to 1 at $P < 0.01$ and $P < 0.001$, respectively (single sample T test).