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**Supplemental Information**

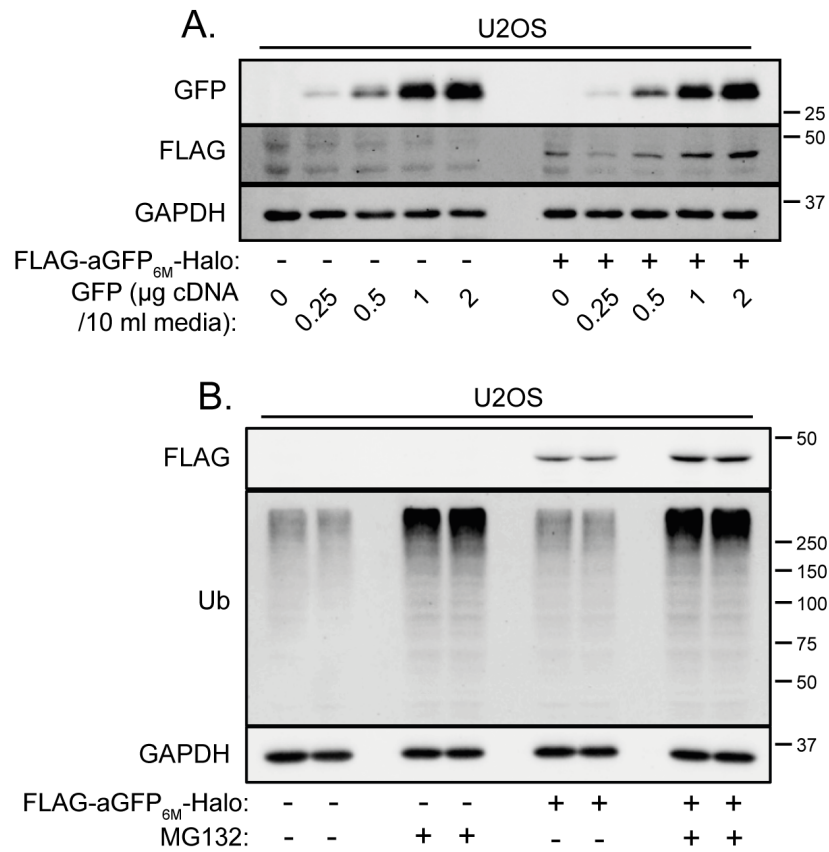
**Inducible Degradation of Target Proteins  
through a Tractable Affinity-Directed  
Protein Missile System**

**Luke M. Simpson, Thomas J. Macartney, Alice Nardin, Luke J. Fulcher, Sascha Röth, Andrea Testa, Chiara Maniaci, Alessio Ciulli, Ian G. Ganley, and Gopal P. Sapkota**

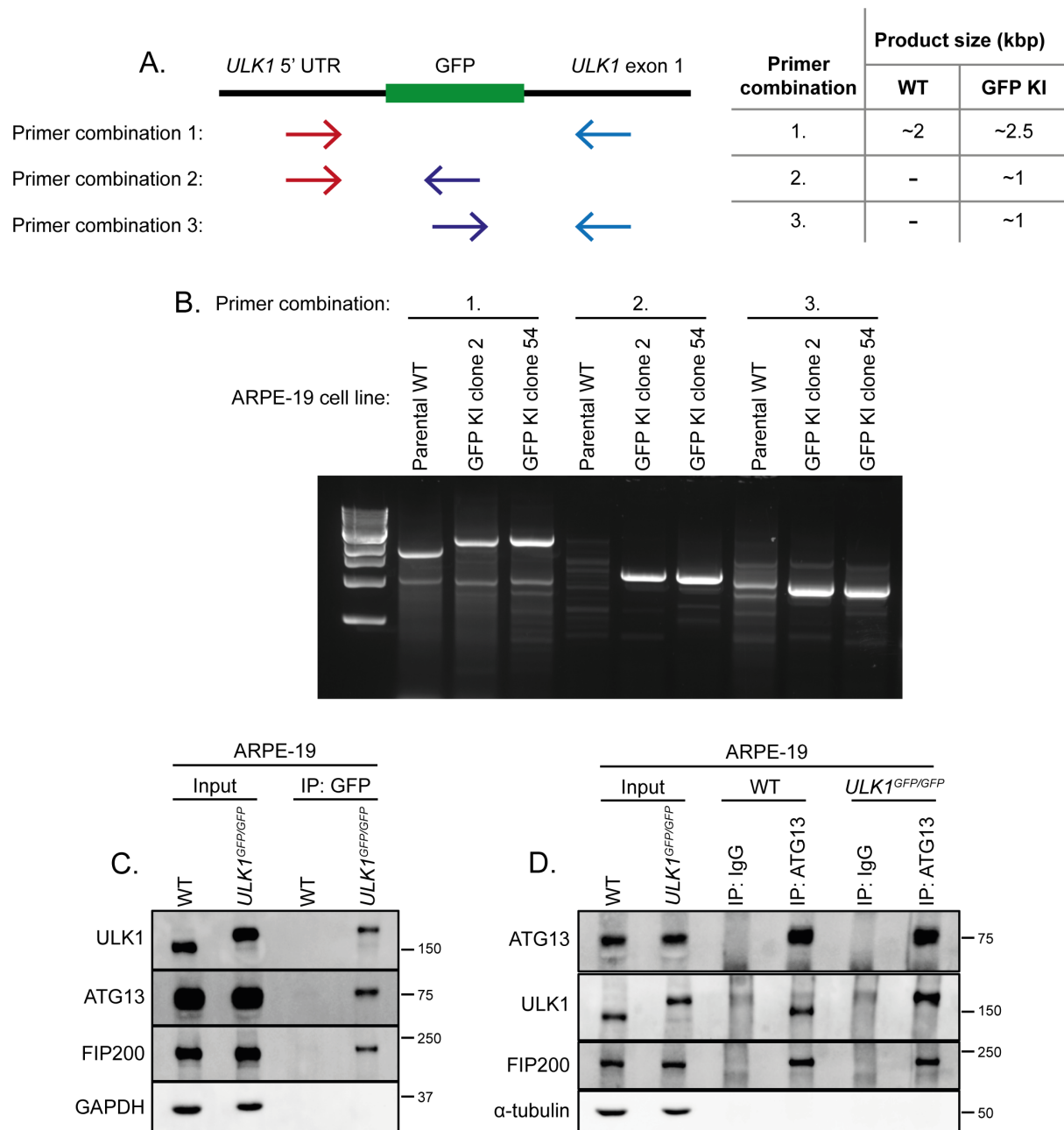
## **Supplemental Information**

Inducible degradation of target proteins through a tractable Affinity-directed PROtein Missile (AdPROM) system

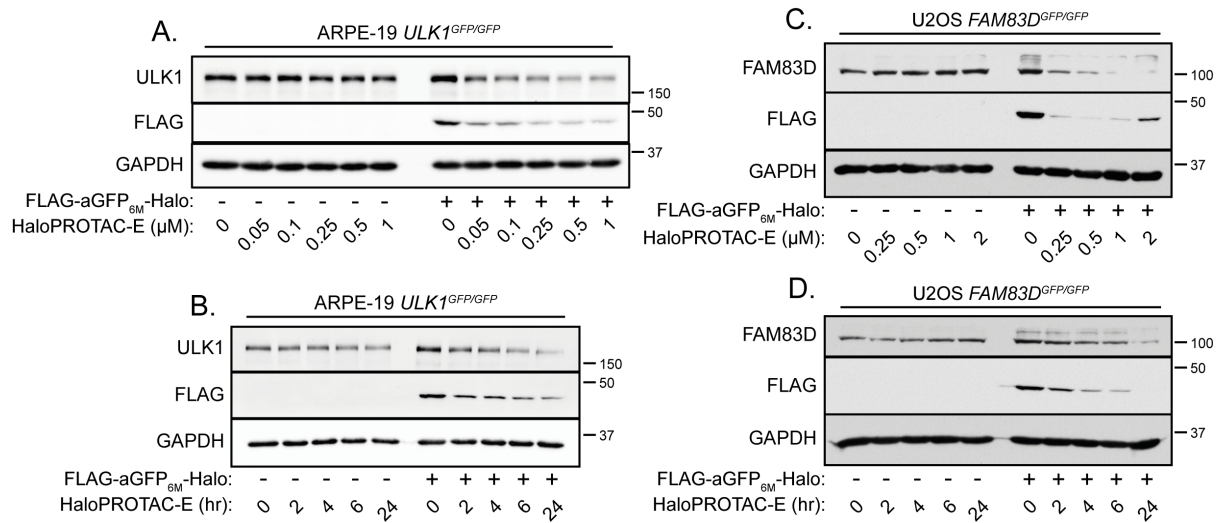
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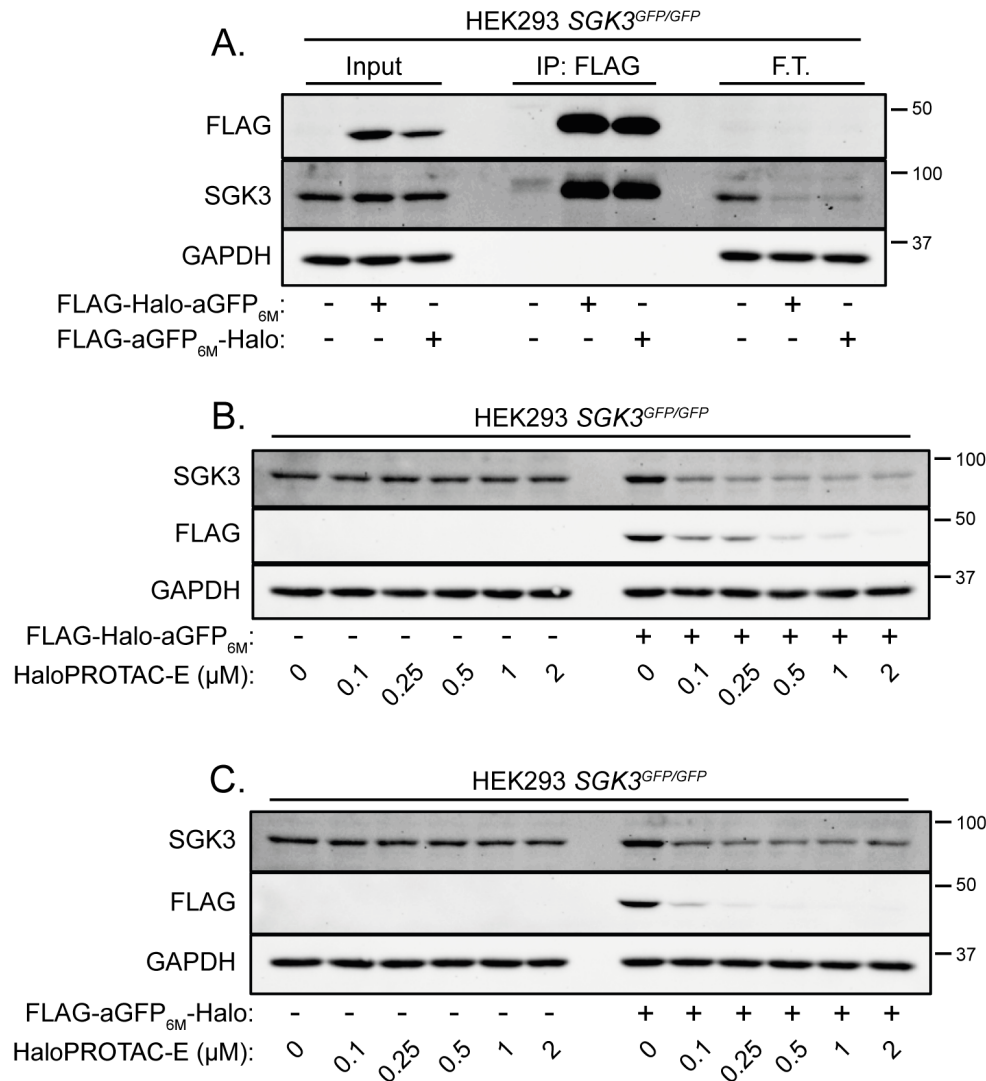
**Figure S1, related to Figure 1. FLAG-aGFP<sub>6M</sub>-Halo levels are controlled by GFP protein abundance.** (A) GFP was transiently expressed with increasing cDNA concentrations (0-2 µg per 10 ml media) in U2OS FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells. (B) U2OS FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were treated with 20 µM MG132 proteasome inhibitor for 6 hr as indicated. For both (A) and (B), extracts were resolved by SDS-PAGE and transferred on to PVDF membranes, which were subjected to immunoblotting with indicated antibodies.



**Figure S2, related to Figure 1. Characterisation of ARPE-19 ULK1 GFP knockin (KI) (*ULK1<sup>GFP/GFP</sup>*) cells. (A) Primers were designed for analysis of the endogenous *ULK1* locus (primer combination 1) and internal primers to recognise the incorporated GFP-tag (primer combination 2 and 3). (B) Agarose gel analysis of ARPE-19 parental WT and ULK1 GFP KI cell line clones 2 and 54. In both clones, an electrophoretic mobility shift is observed in the PCR products of primer combination 1. With both primer combination 2 and 3, no PCR product was observed in parental WT cells, but can be detected for both clone 2 and 54. Clone 54 was used for subsequent experiments. (C) ARPE-19 WT and *ULK1<sup>GFP/GFP</sup>* cells were lysed and subjected to GFP TRAP immunoprecipitation (IP). ULK1 complex components including GFP-ULK1, ATG13 and FIP200 co-precipitated with GFP-ULK1 from *ULK1<sup>GFP/GFP</sup>* cell extracts. (D) ARPE-19 WT and *ULK1<sup>GFP/GFP</sup>* cells were lysed and subjected to ATG13 or IgG IP as indicated. ULK1 complex components including ATG13, ULK1 and FIP200 co-precipitated with ATG13 from WT and *ULK1<sup>GFP/GFP</sup>* cell extracts. For both (C) and (D), extracts and IPs were resolved by SDS-PAGE and transferred on to PVDF membranes, which were subjected to immunoblotting with indicated antibodies.**



**Figure S3, related to Figure 1. GFP-ULK1 and FAM83D-GFP are degraded with HaloPROTAC-E in cells expressing FLAG-aGFP<sub>6M</sub>-Halo. (A)** ARPE-19 *ULK1<sup>GFP/GFP</sup>* FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were treated with increasing concentrations of HaloPROTAC-E (0-1 μM) for 24 hr as indicated. **(B)** ARPE-19 *ULK1<sup>GFP/GFP</sup>* FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were treated with 250 nM HaloPROTAC-E for indicated times (0-24 hr). **(C)** U2OS *FAM83D<sup>GFP/GFP</sup>* FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were treated with increasing concentrations of HaloPROTAC-E (0-2 μM) for 24 hr. **(D)** U2OS *FAM83D<sup>GFP/GFP</sup>* FLAG-empty and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were treated with 1 μM HaloPROTAC-E for indicated times (0-24 hr). For all experiments, extracts were resolved by SDS-PAGE and transferred on to PVDF membranes, which were subjected to immunoblotting with indicated antibodies.



**Figure S4, related to Figure 3. SGK3-GFP is degraded with HaloPROTAC-E in FLAG-Halo-aGFP<sub>6M</sub> and FLAG-aGFP<sub>6M</sub>-Halo expressing cells. (A)** HEK293 *SGK3<sup>GFP/GFP</sup>* FLAG-empty, FLAG-Halo-aGFP<sub>6M</sub> and FLAG-aGFP<sub>6M</sub>-Halo expressing cells were lysed and subjected to immunoprecipitation (IP) with anti-FLAG M2 resin. F.T. = post-IP flow-through extract. HEK293 *SGK3<sup>GFP/GFP</sup>* FLAG-empty, FLAG-Halo-aGFP<sub>6M</sub> **(B)** and FLAG-aGFP<sub>6M</sub>-Halo **(C)** expressing cells were treated with increasing concentrations of HaloPROTAC-E (0-2 μM) for 24 hr as indicated. In all cases, extracts and IPs were resolved by SDS-PAGE and transferred on to PVDF membranes, which were subjected to immunoblotting with indicated antibodies.