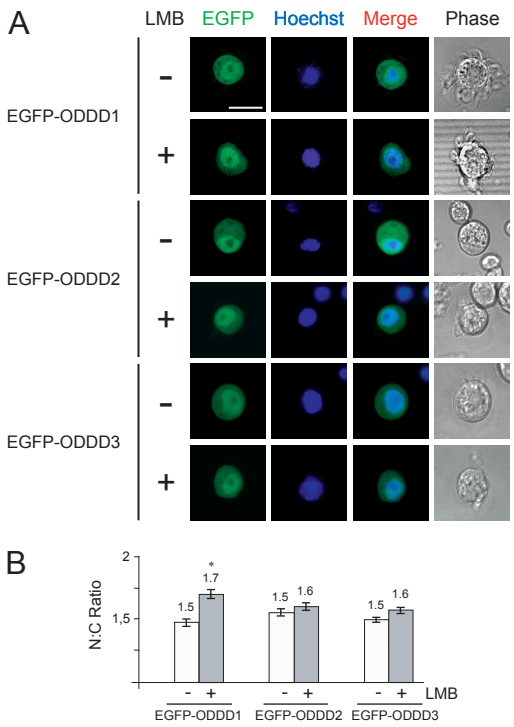
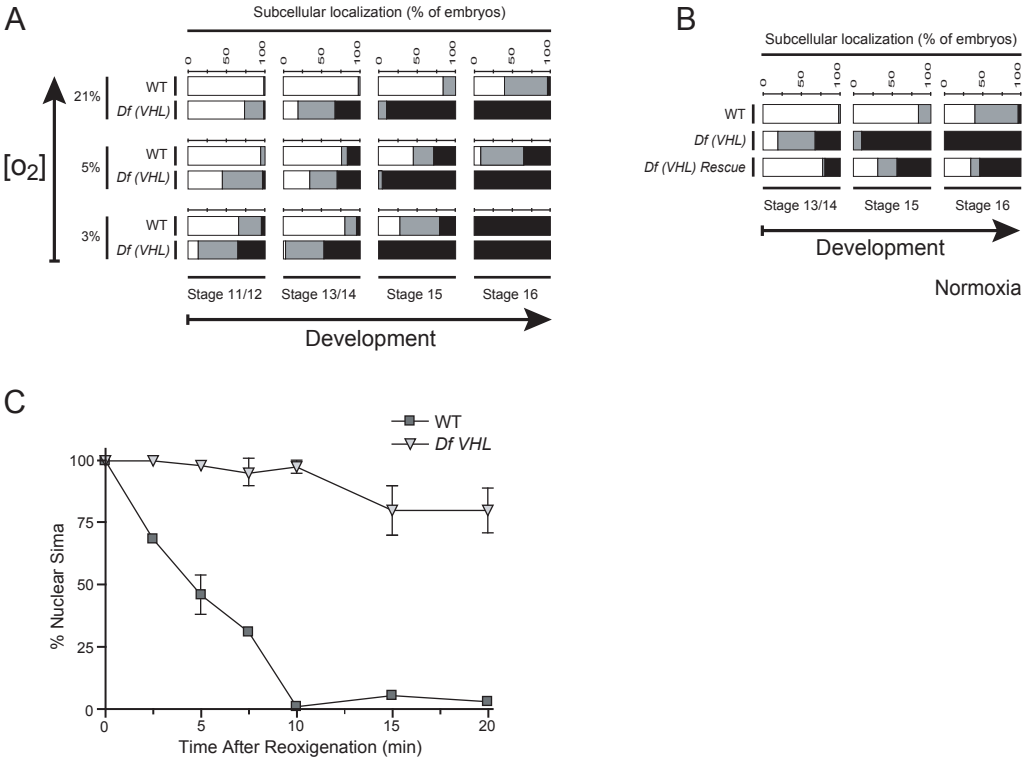
Suppl Figure 1



Supplemental Figure 1: (A) The ODDD was divided into 3 fragments, which were fused to EGFP and transfected to S2 cells for analysis of subcellular localization and sensitivity to LMB. Whereas EGFP-ODDD1 (aa 669-730) became clearly more nuclear upon LMB treatment, EGFP-ODDD2 (aa 725-803) and EGFP-ODDD3 (aa 797-870) were unaffected by LMB, indicating the occurrence of a CRM1-dependent NES in ODDD1. (B) Quantification of the results shown in (A); the Nuclear:Cytoplasmic ratio (N:C) is depicted. T Student test (*, $P<10^{-7}$; $N>20$).

Suppl. Figure 2



Supplemental Figure 2- VHL loss of function embryos exhibit impaired Sima nuclear export: (A) In embryos homozygous for the chromosomal deficiency Df(2R)en-A, that includes the VHL gene (Df (VHL)), Sima was more nuclear than in wild type (y w) controls at all tested oxygen levels throughout embryogenesis ($P<10^{-4}$; N>40). Black color: "Nuclear"; Grey: "Ubiquitous"; White: "Cytoplasmic". (B) Wild type subcellular localization of Sima was partially restored upon ectopic expression of Drosophila VHL in Df(2R)en-A homozygous embryos, suggesting that VHL loss-of-function accounts for the nuclear localization of Sima occurring in embryos homozygous for the deficiency (A). (C) Sima nuclear export assay upon re-oxygenation reveals that export is severely impaired in embryos homozygous for the Df(2R)en-A chromosomal deficiency (Df (VHL) (Kaplan-Meier; $p<10^{-4}$; n>30).