

**Figure S1**: **(A)** Western blot analysis of HIF-1 $\alpha$  and HIF-2 $\alpha$  protein levels in Huh7 cell lysates. Cells were incubated under hypoxia (1% O<sub>2</sub>) for 8 hours. Addition of 1,25 (OH)<sub>2</sub>D3 (100nM) was made either 1 hour

prior (PT) or after (T) cells exposure to hypoxia. **(B)** Western blot analysis of HIF-1 $\alpha$ , HIF-2 $\alpha$ , ARNT and VEGF protein levels in Huh7 cell lysates. Cells were treated with 1,25 (OH)<sub>2</sub>D3 (100nM) and incubated under hypoxia (1% O<sub>2</sub>) for 8 hours (left panel) or 24 hours (right panel), or treated with 1mM DMOG and 1,25 (OH)<sub>2</sub>D3 (100nM) for 8 hours (left panel) or 24 hours (right panel) before collection and lysis. Actin is used as a loading control. **(C)** HIFs transcriptional activity, determined after transfection of HepG2 cells with the pGL3–5HRE-VEGF reporter plasmid and the control plasmid pCI-Renilla. 24 hours post-transfection, HepG2 cells were treated with 1,25 (OH)<sub>2</sub>D3 (100nM) and incubated under hypoxia (1% O<sub>2</sub>) for 8 or 24 hours as indicated. Values show the fold increase of relative luciferase units (firefly over Renilla activity) in relation to the values obtained from cells treated under normoxia 21%O<sub>2</sub> in the absence of 1,25 (OH)<sub>2</sub>D3 and represent the mean of two independent experiments performed in triplicate (± s.e.m) (\*P<0.05; \*\*\*P<0.001). **(D)** Western blot analysis of HIF-1 $\alpha$  and VEGF protein levels in HepG2 cell lysates. Cells were incubated with 1,25 (OH)<sub>2</sub>D3 (100nM) and treated under hypoxia (1% O<sub>2</sub>) for 8 or 24 hours as indicated. Tubulin is used as a loading control. **(E)** Western blot analysis of HIF-1 $\alpha$ , total ERK1/2 and phosphorylated ERK1/2 protein levels in Huh7 cell lysates. Cells were incubated with 1,25 (OH)<sub>2</sub>D3 (100nM) and treated under hypoxia (1% O<sub>2</sub>) for 24 hours as indicated.