Supplementary material

Targeting melanoma hypoxia with the food-grade lactic acid bacterium *Lactococcus lactis*

Rodolfo Garza-Morales, Beatriz E. Rendon, Mohammad Tariq Malik, Jeannete E. Garza-Cabrales, Anne Aucouturier, Luis G. Bermúdez-Humarán, Kelly M. McMasters, Lacey R. McNally and Jorge G. Gomez-Gutierrez

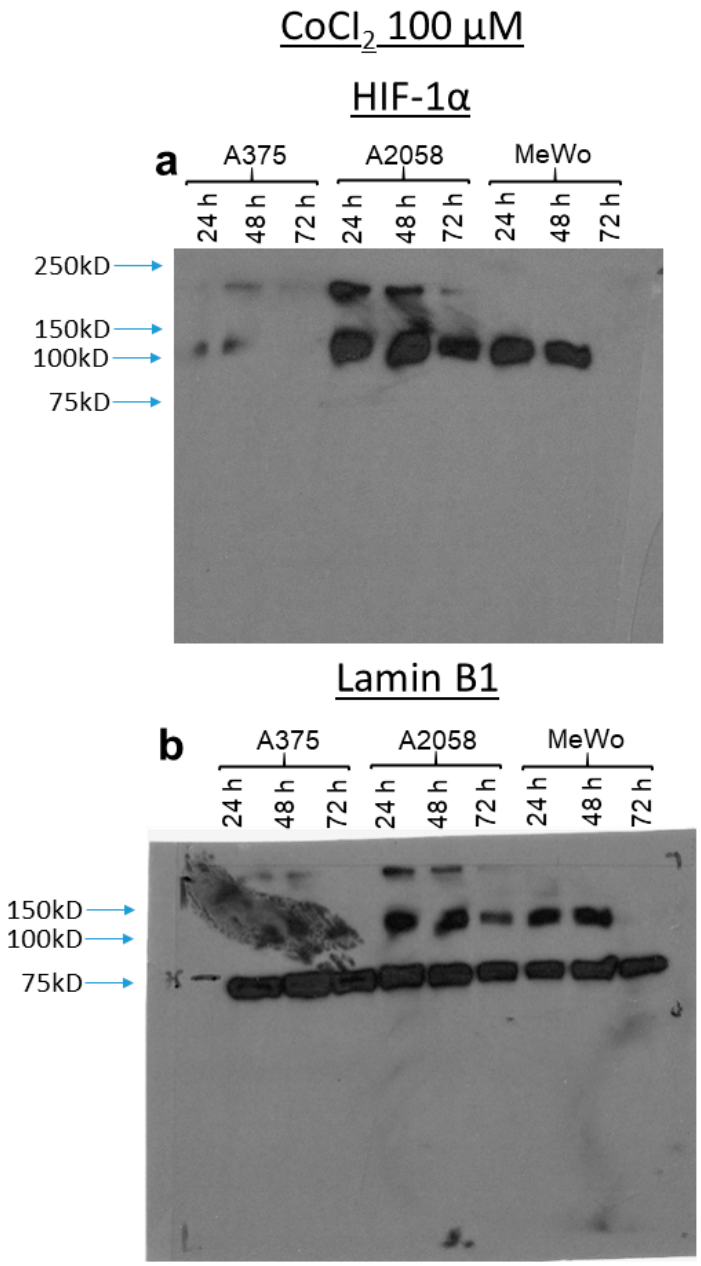

Figure S1. Representative whole blot. (a) A2058, A375, and MeWo cells were treated with $CoCl_2$ at a concentration of 100 µM. Nuclear protein lysates were collected at 24, 48, and 72 h post-treatment. Expression of HIF-1α was detected by Western blot; (b) Lamin B1 was used as a loading control.

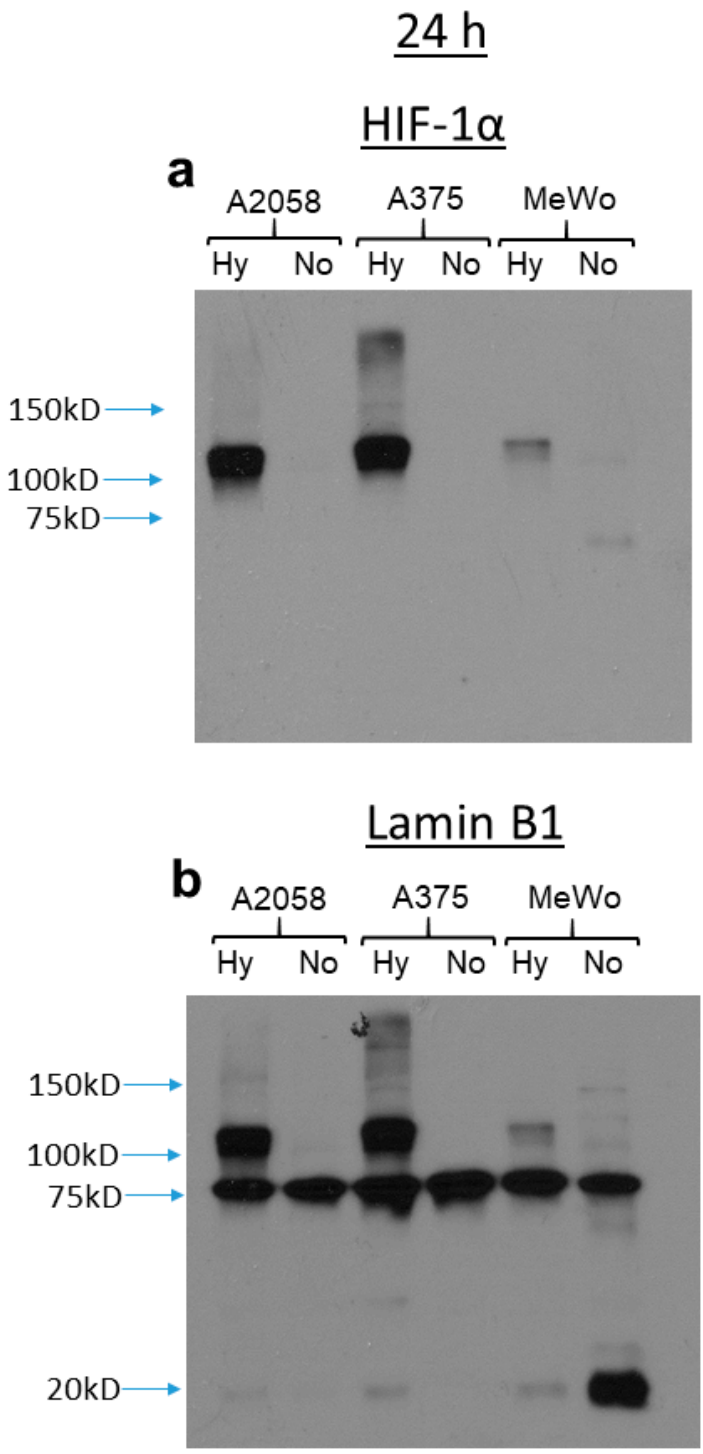

Figure S2. Representative whole blot. (a) A2058, A375, and MeWo cells were incubated on hypoxic (Hy) or normoxic (No) conditions. Nuclear protein lysates were collected at 24 h post-treatment. Expression of HIF-1α was detected by Western blot; (b) Lamin B1 was used as a loading control.

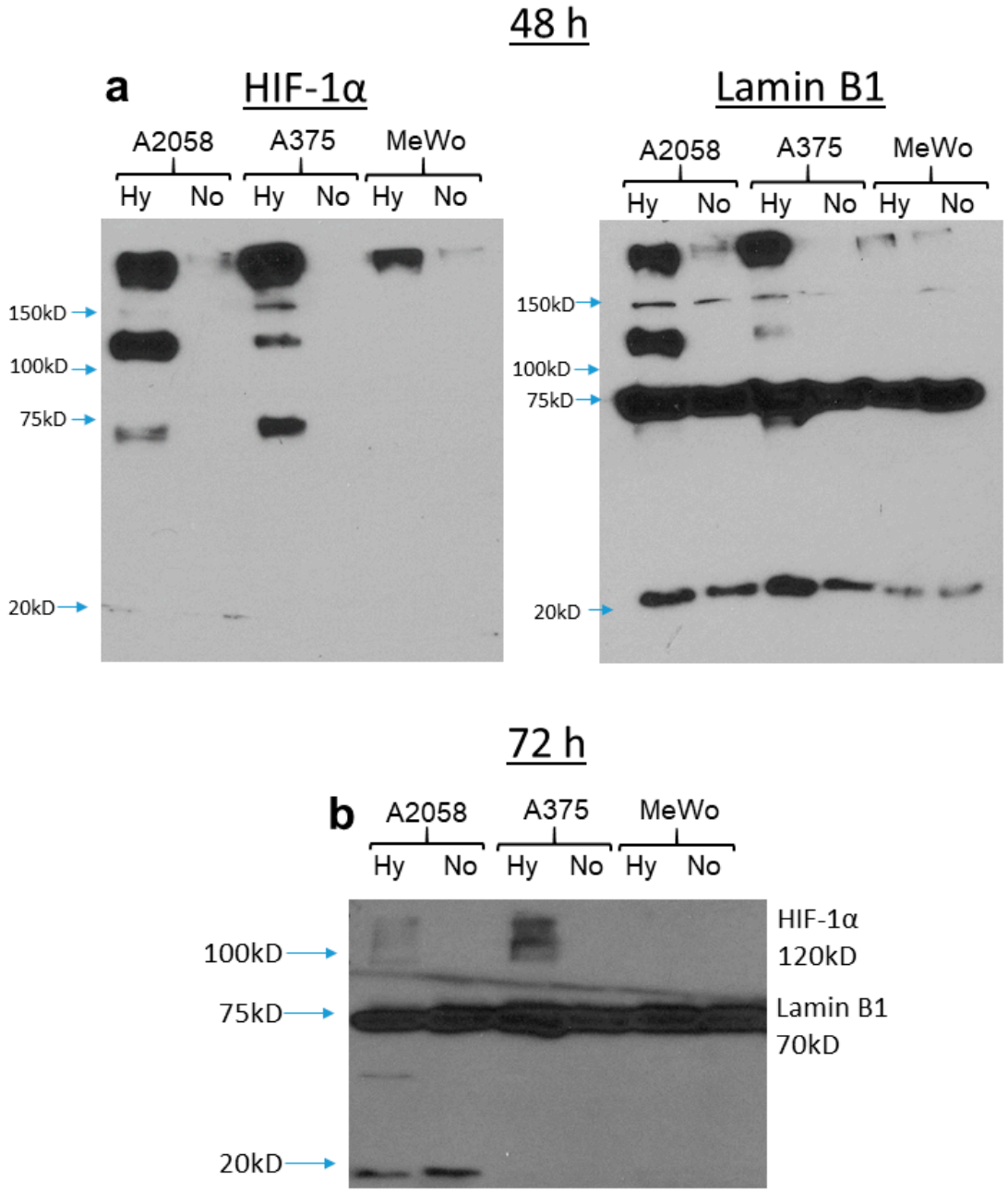

Figure S3. Representative whole blot. (a) A2058, A375, and MeWo cells were incubated on hypoxic (Hy) or normoxic (No) conditions. Nuclear protein lysates were collected at 48 h post-treatment. Expression of HIF-1α was detected by Western blot; Lamin B1 was used as a loading control, (b) Cells were treated as mentioned above, nuclear protein lysates were collected at 72 h post-treatment. Expression of HIF-1α was detected by Western blot; Lamin B1 was used as a loading control.

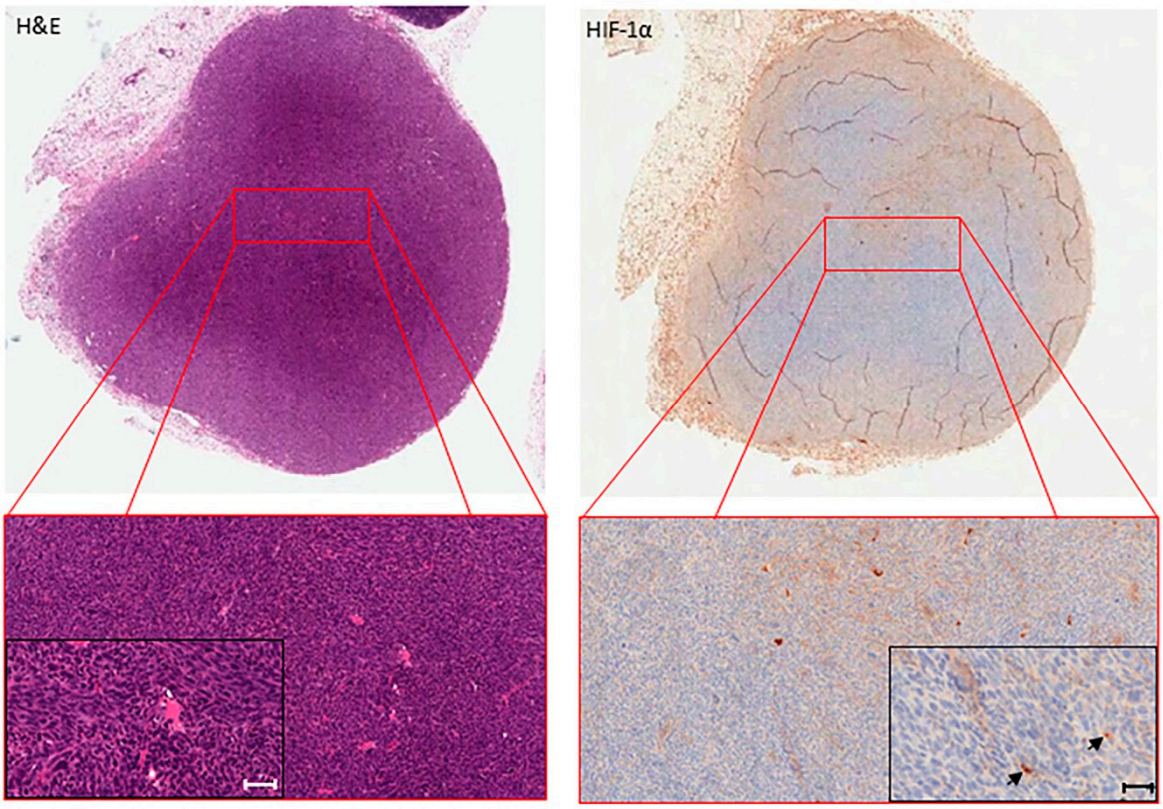

Figure S4 . Representative Hematoxylin and Eosin (H&E) staining and IHC staining of HIF-1α A375 tumor sections from non-injected BALB/c mice at a magnification of x100 and x400. Arrows indicate cells positive for HIF-1α. Whole tissue slides were scanned with Leica Aperio ImageScope with 40x magnification. Scale bar = 50 μm.

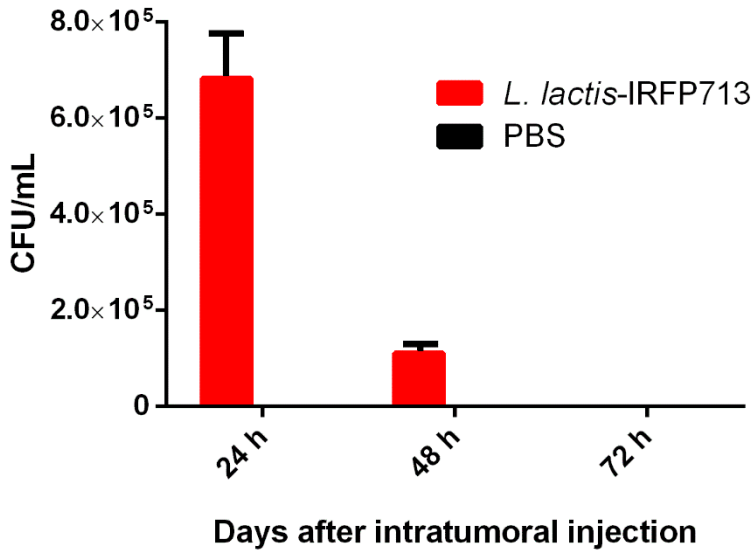

Figure S5. A375 tumors from BALB/c mice were homogenized at 24, 48 and 72 h following *L. lactis*-IRFP713 administration or PBS 1x. The homogenate was plated in serial dilutions on GM17 agar containing 10 μg/ml chloramphenicol.