SUPPLEMENTARY INFORMATION

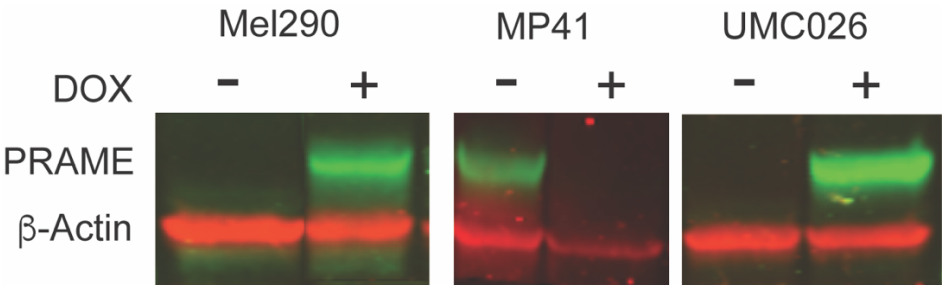
PRAME induces genomic instability in uveal melanoma

Stefan Kurtenbach[1,2,3,5], Margaret I. Sanchez[1,2,3,5], Jeffim Kuznetsoff[1,2,3], Daniel A. Rodriguez[1,2,3], Natalia Weich[2], James Dollar[1,2,3], Anthony Cruz[1,2,3], Sarah Kurtenbach[1,2,3], Matthew G. Field[1,2,3], Michael A. Durante[1,2,3], Christina Decatur[1,2,3], Mahsa Sorouri[4], Fan Lai[2], Ramin Shiekhattar[2], Daniel Pelaez[1,2,3], Zelia M. Correa[1,2,3], Ramiro E. Verdun[2], and J. William Harbour[4*]

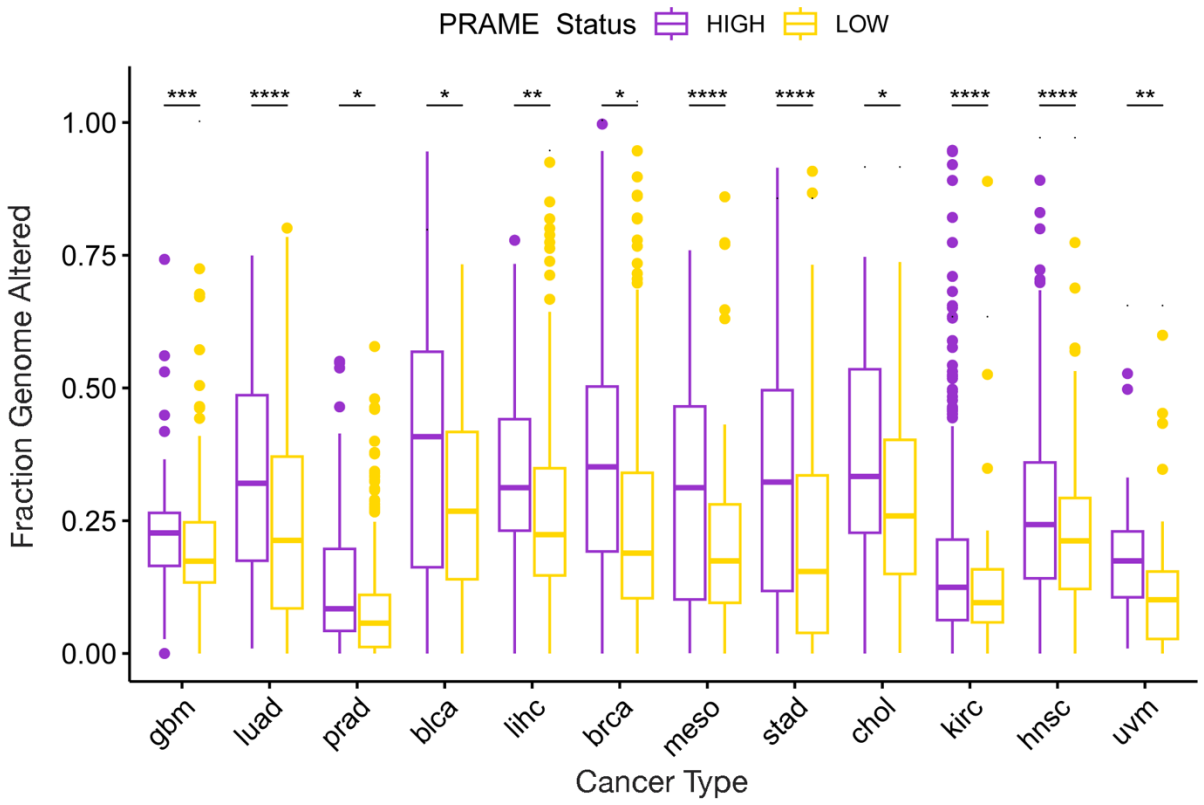
[1]Bascom Palmer Eye Institute, [2]Sylvester Comprehensive Cancer Center, and [3]Interdisciplinary Stem Cell Institute, University of Miami Miller School of Medicine, Miami, FL; [4]Department of Ophthalmology and Simmons Comprehensive Cancer Center, University of Texas Southwestern Medical Center, Dallas, TX.

[5]These authors contributed equally.

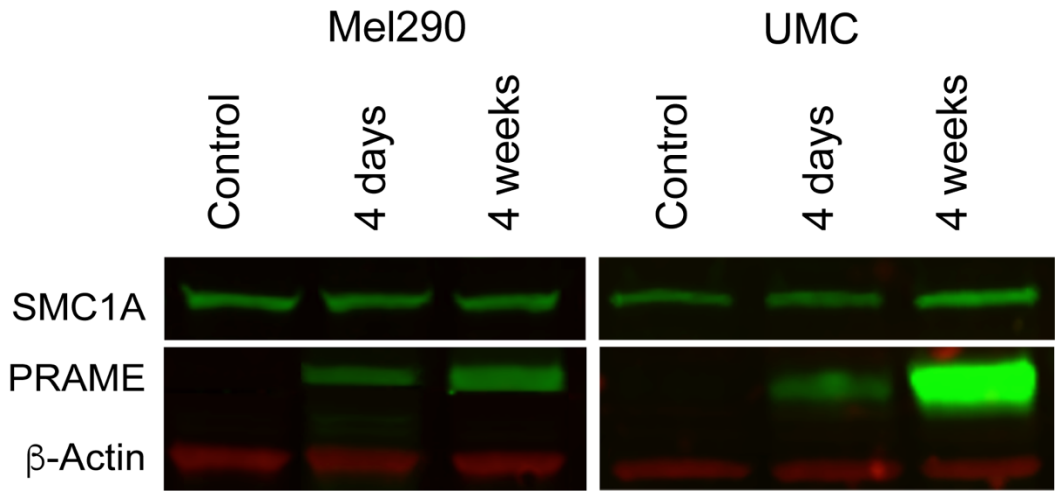
*Corresponding author: J. William Harbour, MD, Department of Ophthalmology and Simmons Comprehensive Cancer Center, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas Texas 75390-9057



Supplementary Figure 1. Western blot to analyze PRAME and β-actin protein levels before and after 1 week of doxycycline (DOX) treatment in Mel290 cells with inducible PRAME expression construct, MP41 cells with inducible shRNA construct targeting PRAME, and uveal melanocytes (UMC) with inducible PRAME expression construct.



Supplementary Figure 2. Pan-Cancer analysis of fraction genome altered in association with increased PRAME expression in 12 cancer types from the Cancer Genome Atlas (TCGA). GMB, glioblastoma multiforme; LUAD, lung adenocarcinoma; PRAD, prostate adenocarcinoma, BLCA, bladder urothelial carcinoma, LIHC, liver hepatocellular carcinoma; BRCA, breast invasive carcinoma; MESO, mesothelioma; STAD, stomach adenocarcinoma; CHOL, cholangiocarcinoma; KIRC, kidney renal clear cell carcinoma; HNSC, head and neck squamous cell carcinoma, and uveal melanoma (UVM). Color indicates the PRAME expression status: purple, high expression; yellow, low expression. Significance: * p<0.05, **p<0.01, ***p<0.001, ****p<0.0001.



Supplementary Figure 3. Western blot to analyze SMC1A, PRAME, and β-actin protein levels. Depicted are the blots for Mel290 and human uveal melanocytes (UMC) following 4 days and 4 weeks of enforced PRAME expression.