



Fig. S1. Responses of other cancer cell lines to P16P1.

Cells were plated at $3 \times 10^4/\text{ml}$ and grown with the indicated concentrations of P16P1 for 5 days with a medium change on day 3. Cells were harvested by standard methods for each line on day 5 and were counted from triplicate cultures as described (Materials and Methods). Means and SEM are shown. The cell lines tested were: (A) LN229 glioblastoma cells, (B) HT29 colon carcinoma cells and (C) PC3 prostate carcinoma cells. All were grown in DMEM with 10% FCS and 10% CO₂. These were kindly provided by respectively: Dr Soo-Hyun Kim (St George's, University of London), Professor W Nicol Keith (University of Glasgow) and Dr Ferran Valderrama (St George's, University of London). Stars indicate significant differences from 0 peptide (vehicle control). (**) $p < 0.01$; (***) $p < 0.001$.

Table S1. Status of p16 pathway genes/proteins in cell lines used

Cell line	p16 (<i>CDKN2A</i>)	<i>CDK4</i>	<i>RB</i> family
Melanoma 451Lu ¹	Defective (NFS)	WT (but cyclin D1 copy gain)	N
Melanoma WM239a ^{1,2}	Homozygous deletion	WT	N
Melanoma WM1158 ¹	Defective (point mutations)	WT	N
Immortal melanocytes Hermes 3c ³	Assumed WT	Assumed WT	Inactivated by HPV-16 E7
HeLa cervical carcinoma	WT, overexpressed in response to RB family dysfunction	WT, repressed by high endogenous p16	Inactivated by HPV-18 E7
PC-3 prostate carcinoma ²	Repressed by methylation	WT	WT
HT29 colorectal adenocarcinoma ²	Repressed by methylation, weak expression	WT	WT
LN229 glioblastoma ^{2,4}	Homozygous deletion	WT	WT
Normal melanocytes: Nohm1, 830c	Assumed WT	Assumed WT	Assumed WT
Normal dermal fibroblasts: Hfib	Assumed WT	Assumed WT	Assumed WT

N: no abnormality reported. NFS: not further specified. WT: wild-type (normal). All cells are human.

¹Data from Wistar Institute website (source of lines).

<https://wistar.org/sites/default/files/2017-11/Herlyn%20Lab%20-%20Cell%20Lines.xlsx>

Viewed 26/06/2023

²Data from COSMIC database (whole exon sequencing). [COSMIC | Catalogue of Somatic Mutations in Cancer \(sanger.ac.uk\)](https://cancer.sanger.ac.uk/cosmic). Viewed 10/07/2023.

³Line Hermes 3c was immortalized from Nohm1 melanocytes by viral transduction of TERT and HPV16-E7 (Gray-Schopfer et al, 2006, see main text).

⁴Ishii N., Maier D., Merlo A., Tada M., Sawamura Y., Diserens A. C. and Van Meir E. G. (1999). Frequent co-alterations of TP53, p16/CDKN2A, p14ARF, PTEN tumor suppressor genes in human glioma cell lines. *Brain Pathol.* **9**, 469-479.