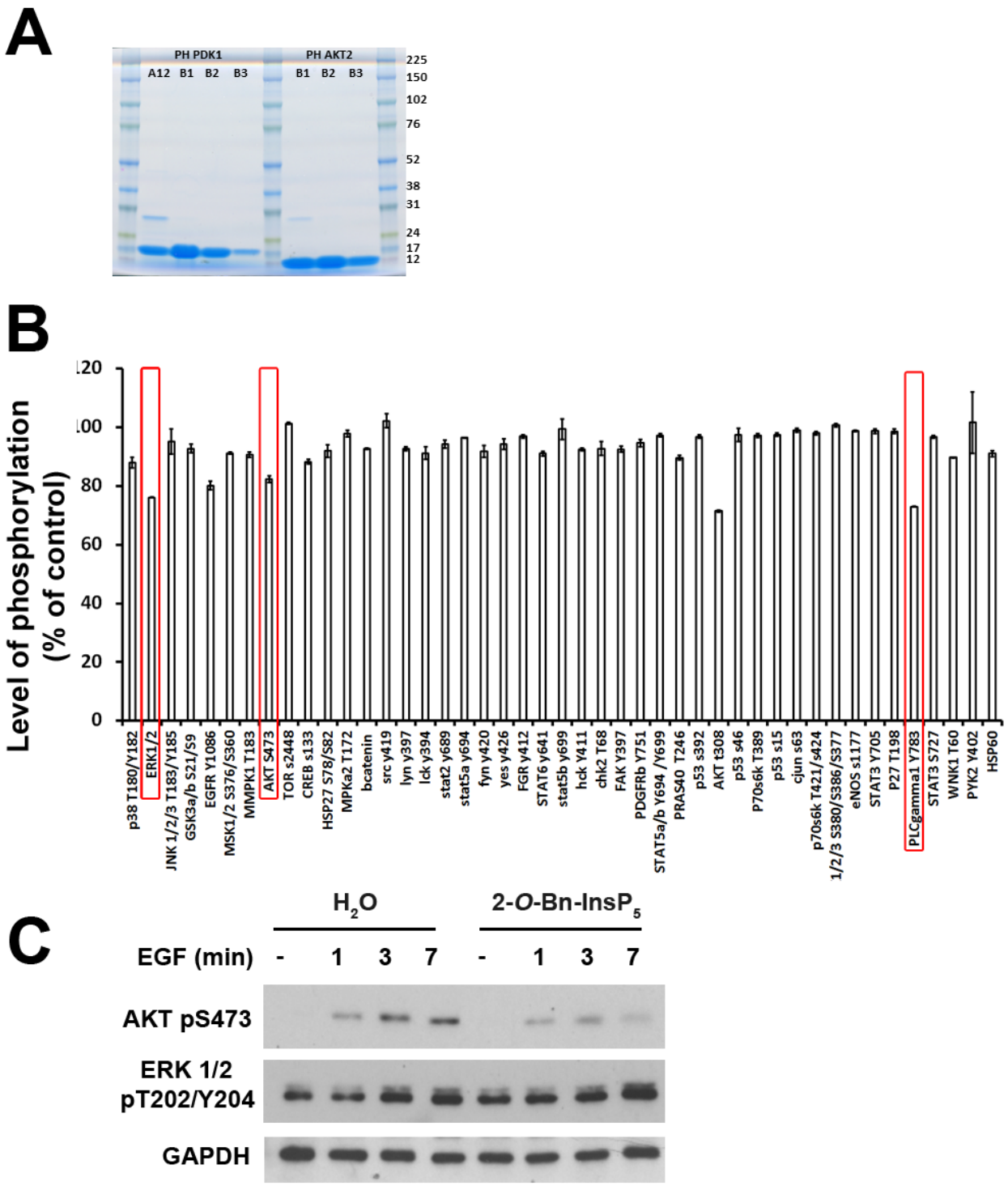
A Small Molecule Inhibitor of PDK1/PLCγ1 Interaction Blocks Breast and Melanoma Cancer Cell Invasion

Claudio Raimondi[1,†], Veronique Calleja[2,#], Riccardo Ferro[1], Alessandro Fantin[3], Andrew M. Riley[4], Barry V. L. Potter[4,5], Caroline H. Brennan[6], Tania Maffucci[1], Banafshé Larijani[2,&] and Marco Falasca[1,7,*]

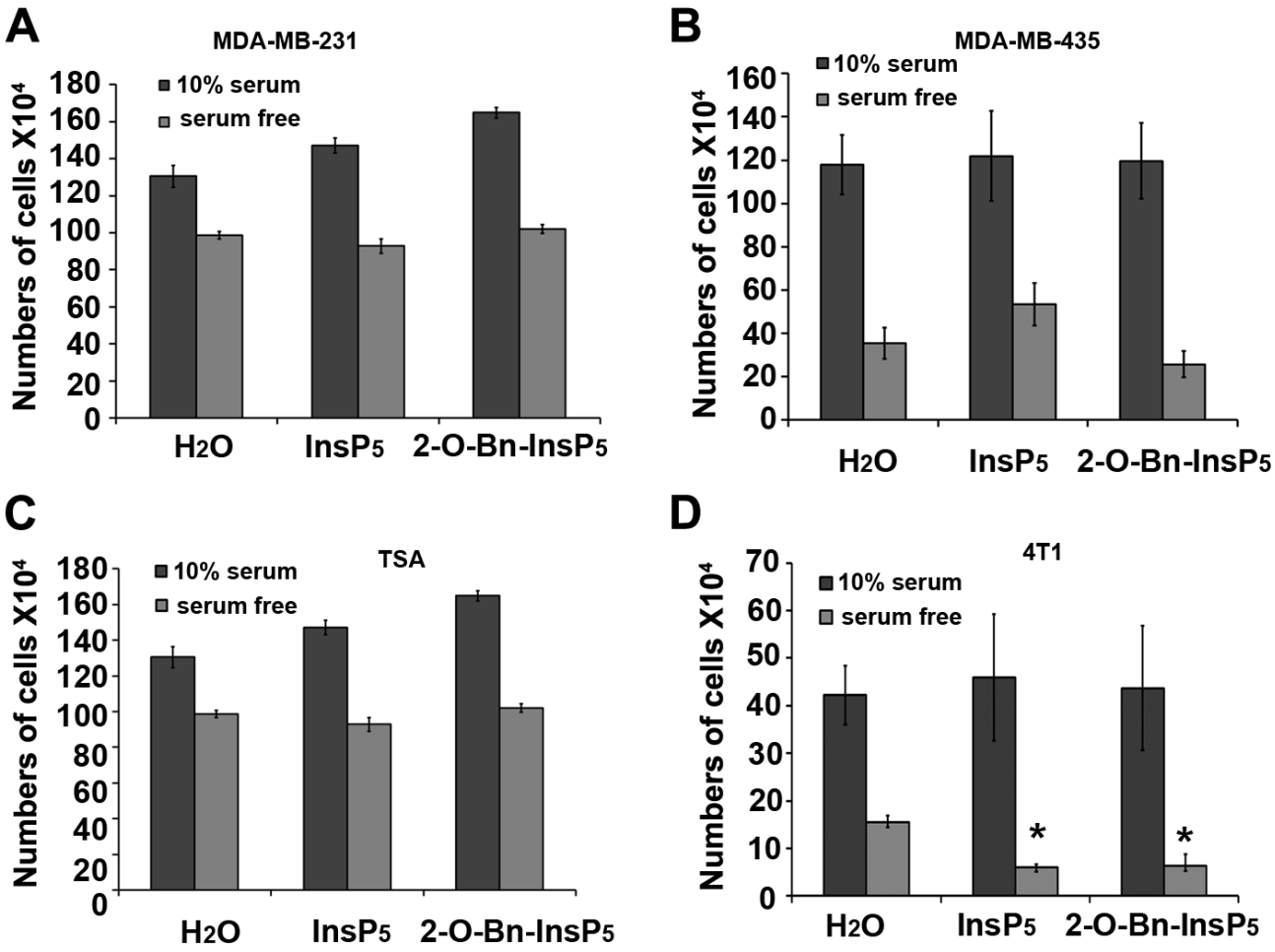
Supplementary Information

Supplementary Figure 1



Supplementary Figure 1. (A) Assessing the purity of the PDK1 and AKT2 PH domains. The purity of the PH domains after S75 size exclusion chromatography was assessed by SDS-PAGE using a 4-12% polyacrylamide gel and visualised with the Gelcode protein staining solution. The fractions analysed correspond to peaks on the resulting chromatogram (A12-B3 and B1-B3 indicate fraction number for the PH domain of PDK1 and AKT2 respectively). (B) Results from phosphokinase antibody array performed on lysates form MDA-MB-231 treated with 50 μM 2-*O*-Bn-$InsP_5$ or vehicle alone and stimulated with EGF 50ng/ml for 3 minutes. (C) Representative Western blot of EGF-induced AKT serine 473 and ERK1/2 T202/Y204 phosphorylation in MDA-MB-231 untreated or treated with 50 μM 2-*O*-Bn-$InsP_5$.

Supplementary Figure 2



Supplementary Figure 2. Cell counting experiment assessing cell proliferation (10% serum) and survival (serum free condition) in MDA-MB-231 (A), MDA-MB-435 (B), TSA (C) and 4T1 cell lines (D) after 72 hours of treatment with 2-*O*-Bn-$InsP_5$ and $InsP_5$ (50 μM). Data are means ±SEM of values obtained from 3 independent experiments in duplicate. *$p<0.05$.