

Figure S1: **PANX1 expression does not correlate with age.** Scatter plots representing the analysis of PANX1 mRNA expression correlation with age in breast cancer tissues ( $P = 0.904$ ) and in adjacent non-cancerous breast tissues ( $P = 0.892$ ).

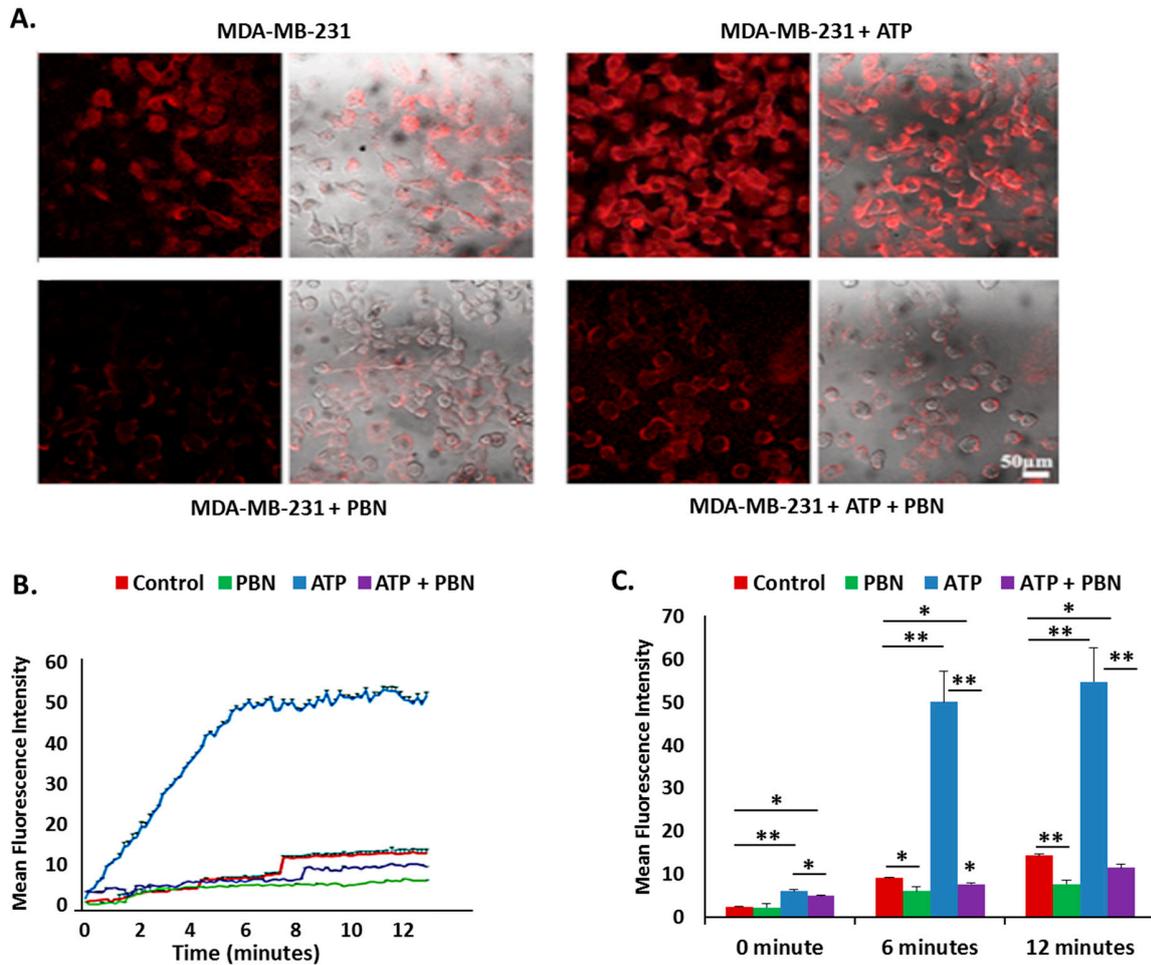
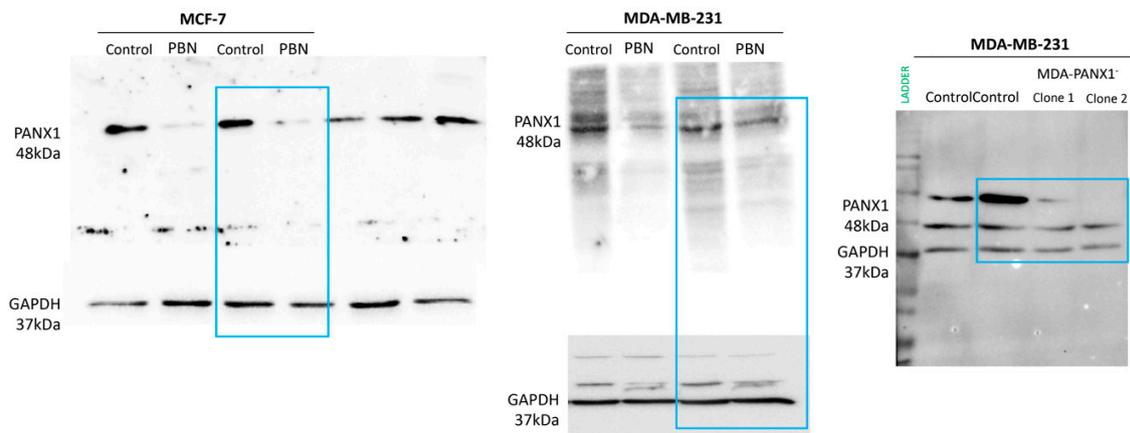


Figure S2: **PBN attenuates ATP-induced EtBr dye uptake by PANX1 channels.** (A) Representative fluorescence micrographs of EtBr uptake. EtBr dye uptake was induced in untreated MDA-MB-231 cells and in MDA-MB-231 cells pre-treated with 1 mM PBN, by the addition of 1 mM ATP in normal divalent physiological solution (2 mM  $\text{Ca}^{2+}$  and 1 mM  $\text{Mg}^{2+}$ ) and at room temperature. (B) Kinetic traces of the conditions specified in (A); Dye uptake was recorded by live imaging and images were acquired at 10-second intervals. The mean fluorescence intensity (MFI) of 5 different fields in each micrograph was used to quantify overall fluorescence. Data are displayed as EtBr MFI. (C) Summary of dye uptake assays in (B); Bar charts represent MFI calculated at 0, 6 and 12-minute timepoints for the different conditions. Results are representative of 2 independent experiments. \* $P < 0.05$ , \*\* $P < 0.01$ , and \*\*\* $P < 0.001$ .



**Figure S3:** Original western blot images captured using the BioRad Chemidoc MP system.

**Table S1:** Intensity ratios of the densitometry analysis of PANX1 and GAPDH western blot bands

		Run 1	Run 2	Run 3	Average	Standard Deviation	<i>p</i> value
MCF-7	Control	0.778	0.607	0.626	0.670	0.093	
	PBN	0.137	0.133	0.133	0.134	0.002	<i>p</i> < 0.005
MDA-MB-231	Control	0.859	1.044	0.631	0.845	0.207	
	PBN	0.520	0.384	0.510	0.471	0.075	<i>p</i> < 0.05
	Control	1.427	1.213	1.450	1.363	0.131	
MDA-PANX1 <sup>-</sup>	Clone 1	0.670	0.404	0.382	0.485	0.160	<i>p</i> < 0.005
	Clone 2	0.838	0.609	0.755	0.734	0.116	<i>p</i> < 0.005
PBN: Probenecid <i>P</i> values were calculated according to Student's <i>t</i> -test.							