

## Supplementary Materials

**Table S1.** Patients' clinical data.

**Figure S1.** Plot showing spectral count measurements comparing results from a secretome processed using the standard proteomic workflow with a protocol using a pretreatment with Proteinase K.

**Figure S2.** Cell proliferation of BT549 cells resistant to paclitaxel.

**Figure S3.** SOD2-I58T mutant is not recognized by ELISA. SOD2 levels were measured in two secretomes, from BT549-WT and BT549-shSOD2-I58T cells, by immunoblot (left panel) and by ELISA (right panel).

**Figure S4.** Uncropped blots

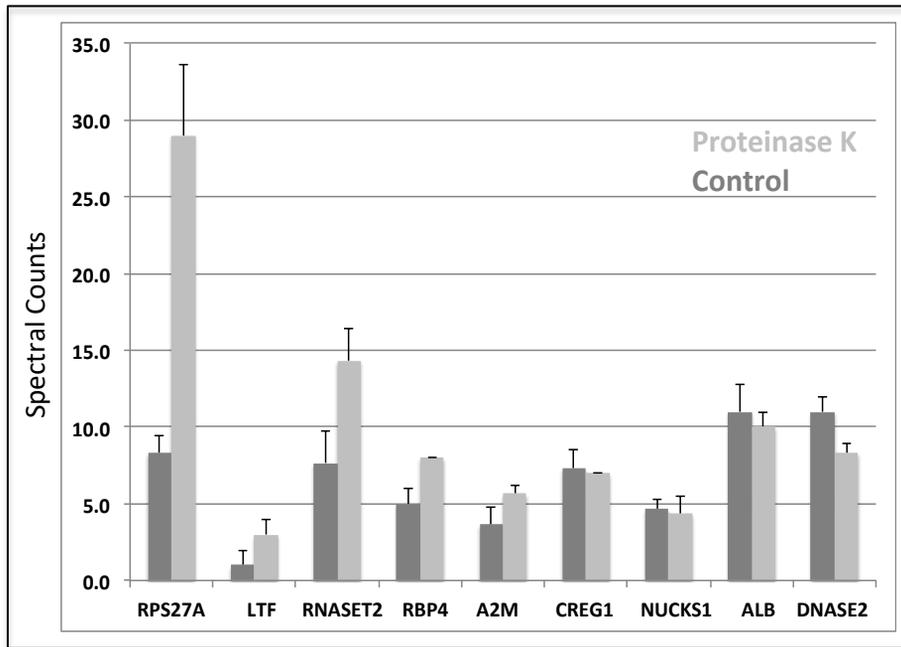
# Table S1

ID	Breast Cancer Subtype	Histologic grade	Ki67 (%)	cTNM	Neoadjuvant chemotherapy	Clinical response	Radiologic response <sup>a</sup>	Data IQ	ypTNM	Relapse
Neo_1	Luminal B HER2 -	2	30	T3N3M0	Paclitaxel > Antracyclines	CR	PR	4/11/2016	ypT1aN1mic	Yes
Neo_2	Luminal B HER2 - --> TN	2	45	T2N0M0	Paclitaxel > Antracyclines	PR	SD	4/21/2016	ypT2N0	No
Neo_3	Luminal B HER2 -	3	70	T2N0M0	Paclitaxel > Antracyclines	CR	CR	7/31/2018	ypT1bN0	No
Neo_4	TNBC	2	70	T2N1M0	Carboplatin-Paclitaxel > Antracyclines	CR	CR	9/7/2018	ypT0N0- pCR	No
Neo_5	TNBC	3	80	T2N0M0	Carboplatin-Nab-Paclitaxel (only 8C)	CR	CR	10/10/2018	ypT0N0- pCR	No
Neo_6	TNBC	3	95	T2N3M0	Carboplatin-Paclitaxel -> Myocet-Ciclo	CR	PR	8/28/2018	ypT0N0- pCR	Yes
Neo_7	Luminal A	2	15	T3N0M0	Antracyclines > Paclitaxel	CR	PR	11/23/2018	ypT1bN1 mic	No
Neo_8	TNBC	3	55	T2N0M0	Carboplatin-Paclitaxel > Antracyclines	CR	CR	11/7/2018	ypTisN0	No

Notes:

a: Radiologic response assessment to neoadjuvant chemotherapy was done to classify disease outcome as a complete response (CR), partial response (PR), stable disease (SD) or progressive disease (PD) using the RECIST criteria v1.1.

Figure S1

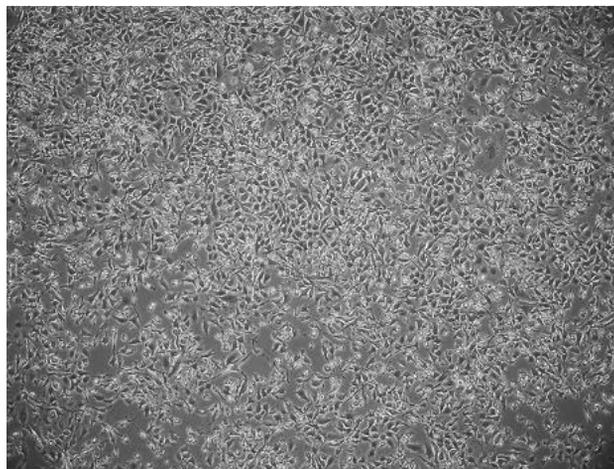


## BT549 cells resistant to Paclitaxel

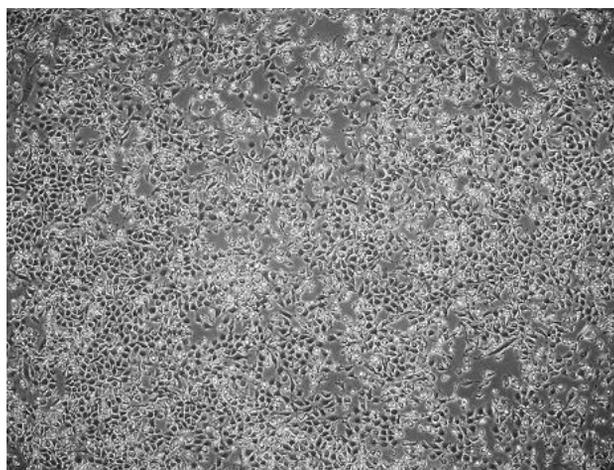
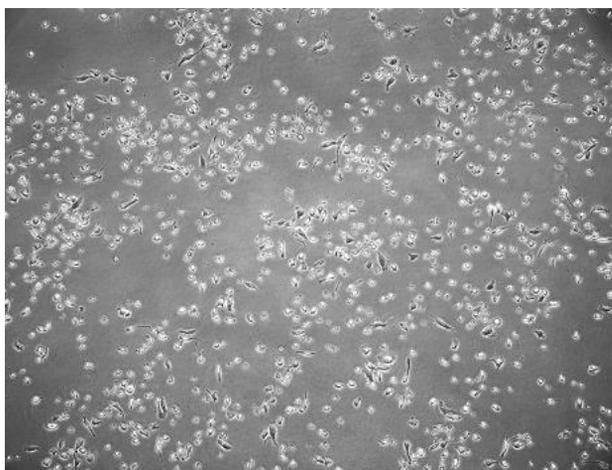
time 0h

time 72h

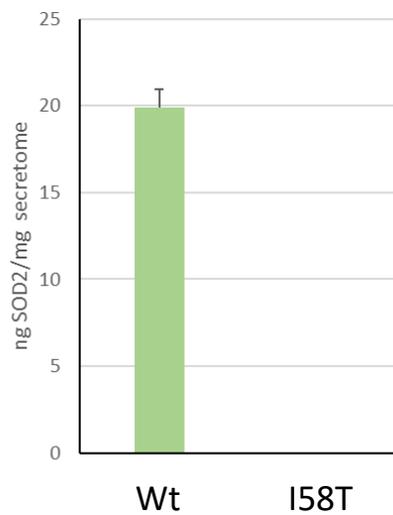
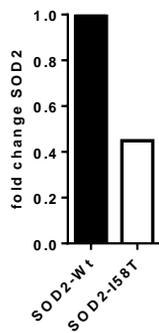
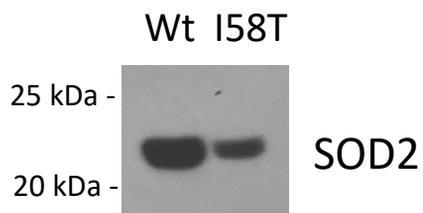
Control



Paclitaxel 4 nM



BT549 Secretomes



Uncropped blots

Figure 2A

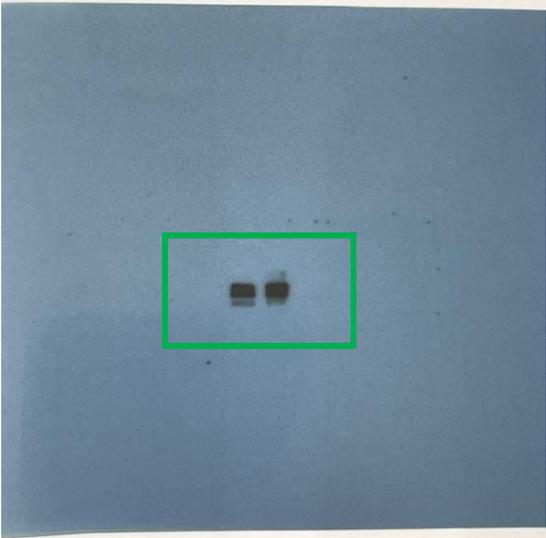


Figure 2A and 2C



Figure 2C

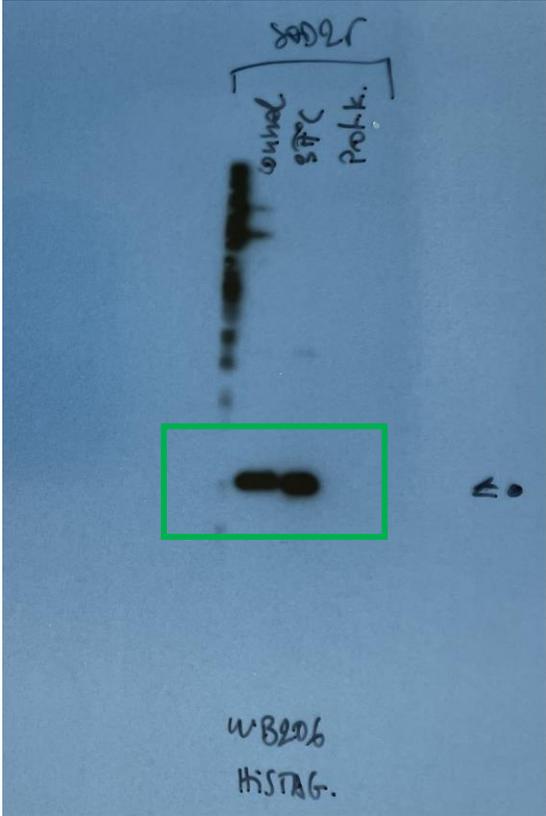


Figure 2D

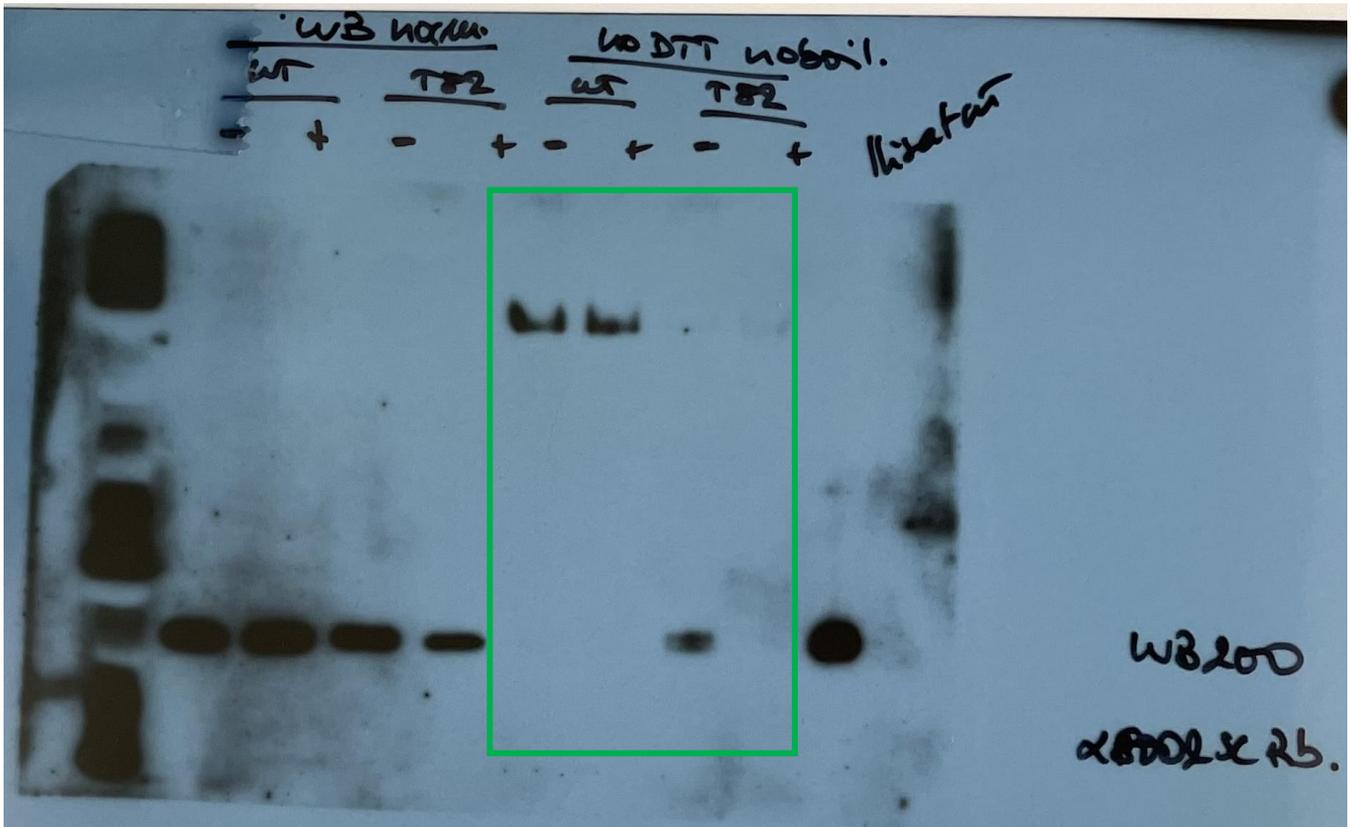


Figure S3

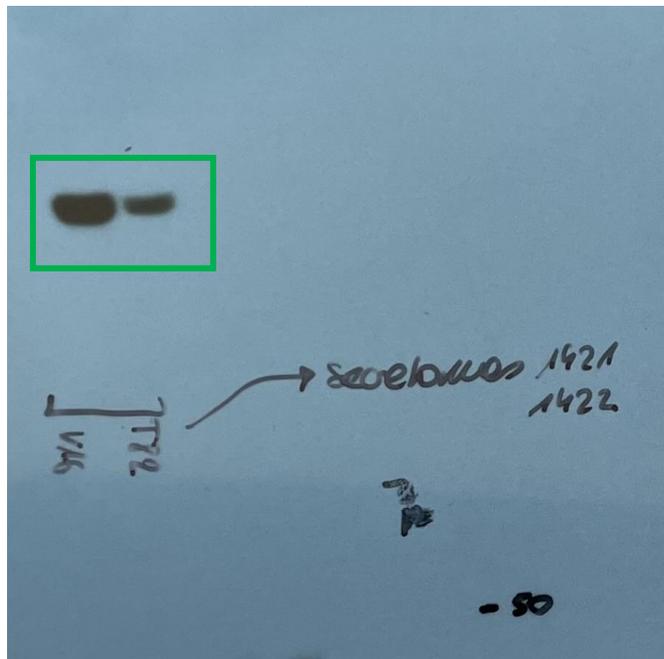


Figure 4B

