Table SI. Sequences of primers used in this study.

Name	Primers (5'-3')
GeneChem,	F: ACACCATGGGAGCTGGTAAT
Mycoplasma	R: CTTCATCGACTTCCAGACCC

F, forward, R, reverse.

Table SII. Oligonucleotide sequences for shRNA.

Target gene	Code	Sequence
PNO1	14767	GATACACACCATTGAAAGAAA
	14768	GCTGAACAATTTCAGTCATTT
	14769	GCAATATTCGAGCTGTGGCTA
Control	sh-Ctrl	TTCTCCGAACGTGTCACGT

Lentiviruses encoding shRNA targeting PNO1 and control shRNA were designed, synthesized and packaged by Shanghai GeneChem Co., Ltd. All oligonucleotides were double-stranded. In the case of shRNAs, only the 5'-3' strand is shown. sh-, short hairpin.

Table SIII. Association between PNO1 expression and clinicopathological characteristics of patients with breast cancer.

Characteristics	T-4-1 (NI-144)	PNO1 pro	otein expression	D 1	
	Total (N=144)	Low (n=124)	High (n=20)	P-value	
Age					
≤51	75 (52.1%)	66 (45.8%)	9 (6.3%)	0.498	
>51	69 (47.9%)	58 (40.3%)	11 (7.6%)		
Pathology stage					
I	36 (25.0%)	32 (22.2%)	4 (2.8%)		
II	107 (74.3%)	91 (63.2%)	16 (11.1%)	0.644	
III	1 (0.7%)	1 (0.7%)	0 (0.0%)		
Tumor size					
≤5 cm	130 (90.3%)	111 (77.1%)	19 (13.2%)	0.446	
>5 cm	14 (9.7%)	13 (9.0%)	1 (0.7%)		
TNM stage					
I-II	95 (66.0%)	80 (55.6%)	15 (10.4%)	0.362	
III-IV	49 (34.1%)	44 (30.6%)	5 (3.5%)		
ER status					
Negative	42 (29.2%)	36 (25.0%)	6 (4.2%)	0.001	
Positive	90 (62.5%)	77 (53.5%)	26 (18.1%)	0.981	
PR status					
Negative	52 (36.1%)	44 (30.6%)	8 (5.6%)	0.818	
Positive	79 (54.9%)	68 (47.2%)	11 (7.6%)	0.818	
HER2 status					
Negative	89 (61.8%)	74 (51.4%)	15 (10.4%)	0.232	
Positive	44 (30.6%)	40 (27.8%)	4 (2.8%)		

PNO1, partner of NOB1 homolog; BC, breast cancer; ER, estrogen receptor; PR, progesterone receptor; HER2, human epidermal growth factor receptor 2.