

**Table S1:** *In silico* analysis of breast cancer related genes present in the most representative rat breakpoint bands, and its correspondent human homolog.

RNO		Human		
Breakpoint region	Gene	Homolog gene	Cytogenetic position	Gene Definition
3p12	<i>Rxra</i>	<i>RXRA</i>	9q34.2	retinoid X receptor, alpha
	<i>Ptges</i>	<i>PTGES</i>	9q34.11	prostaglandin E synthase
6q14	<i>Rhob</i>	<i>RHOB</i>	2p24.1	ras homolog gene family, member B
	<i>Ncoa1</i>	<i>NCOA</i>	2p23.3	nuclear receptor coactivator 1
	<i>Cad</i>	<i>CAD</i>	2p23.3	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
13p13	<i>Bcl2</i>	<i>BCL2</i>	18q21.33	B-cell CLL/lymphoma 2
15p12	<i>Ctsb</i>	<i>CTSB</i>	8p23.1	cathepsin B
	<i>Gnrh1</i>	<i>GNRH1</i>	8p21.2	gonadotropin-releasing hormone 1 (luteinizing-releasing hormone)
	<i>Ptk2b</i>	<i>PTK2B</i>	8p21.2	PTK2B protein tyrosine kinase 2 beta
15p13	<i>Mmp14</i>	<i>MMP14</i>	14q11.2	matrix metalloproteinase 14 (membrane-inserted)
15p14	<i>Bmp4</i>	<i>BMP4</i>	14q22.2	bone morphogenetic protein 4
	<i>Apex</i>	<i>APEX</i>	14q11.2	APEX nuclease (multifunctional DNA repair enzyme) 1
	<i>Ang1</i>	<i>ANG1</i>	14q11.2	angiogenin, ribonuclease, RNase A family, 5
	<i>Anxa7</i>	<i>ANXA7</i>	10q22.2	annexin A7
19q12	<i>Thrb</i>	<i>THRB</i>	3p24.2	thyroid hormone receptor, beta
	<i>Cdh1</i>	<i>CDH1</i>	16q22.1	Cadherin 1, type 1, E-cadherin (epithelial)
	<i>Zfx3</i>	<i>ZFX3</i>	16q22.2	Zinc finger homeobox 3
	<i>Bcar1</i>	<i>BCAR1</i>	16q23.1	Breast cancer anti-estrogen resistance 1
	<i>Cdh13</i>	<i>CDH13</i>	16q23.3	Cadherin 13, H-cadherin (heart)