Supplementary Table and Figure

<u>Supplementary Table 1.</u> Kinase activity of the inactive kinase domains, Her3, Her3 mutations and Her4 D843N, and the active kinases, Her2/neu and Her4. For Her3 mutation A and B, kinase activity measurements gave results that were identical or slightly lower than the background (no enzyme) control and are hence reported as zero. For the remaining kinases, data represent mean \pm standard deviation of n=4.

Specific Activity (pmol product/µg kinase/min)

Kinase domain Protein	No Liposomes	Nickel Liposomes
Her3	0.0 ± 0.2	0.0 ± 0.1
Her3 mutation A	0	0
Her3 mutation B	0	0
Her4 D843N	0.0 ± 0.1	0.2 ± 0.2
Her2/neu	12.2 ± 0.5	36.6 ± 1.8
Her4	34 ± 4	$1,460 \pm 24$

Supplementary Fig. 1. Purity of the Her4, Her3 and Her2/neu kinase domain proteins. Her4 kinase domain (Her4 kd) with His6 tag or after TEV protease treatment, Her4 kd+tail, Her3 kinase domain, and Her2/neu kinase domain was resolved on SDS-PAGE and stained with SimplyBlue stain (Invitrogen). Total protein loading was 1.5 μg for all lanes except for Her2/neu kd, where 0.6 μg was loaded. All Her4 constructs and the Her3 kinase domain underwent gel-filtration after Ni-NTA-Agarose. Her2/neu kd preparation contained 0.01% Tween-20 and had no further purification after Ni-NTA-Agarose. Protein purity was estimated to be >95% for Her4 constructs and approximately 80% for Her2/neu.

Supplementary Fig. 1

