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Title: ^{11}C Labeled Pictilisib (GDC-0941) as a Molecular Tracer Targeting Phosphatidylinositol 3-kinase (PI3K) for Breast Cancer Imaging

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Conflicts of interest

The authors declare no potential conflicts of interest.

Supplement data

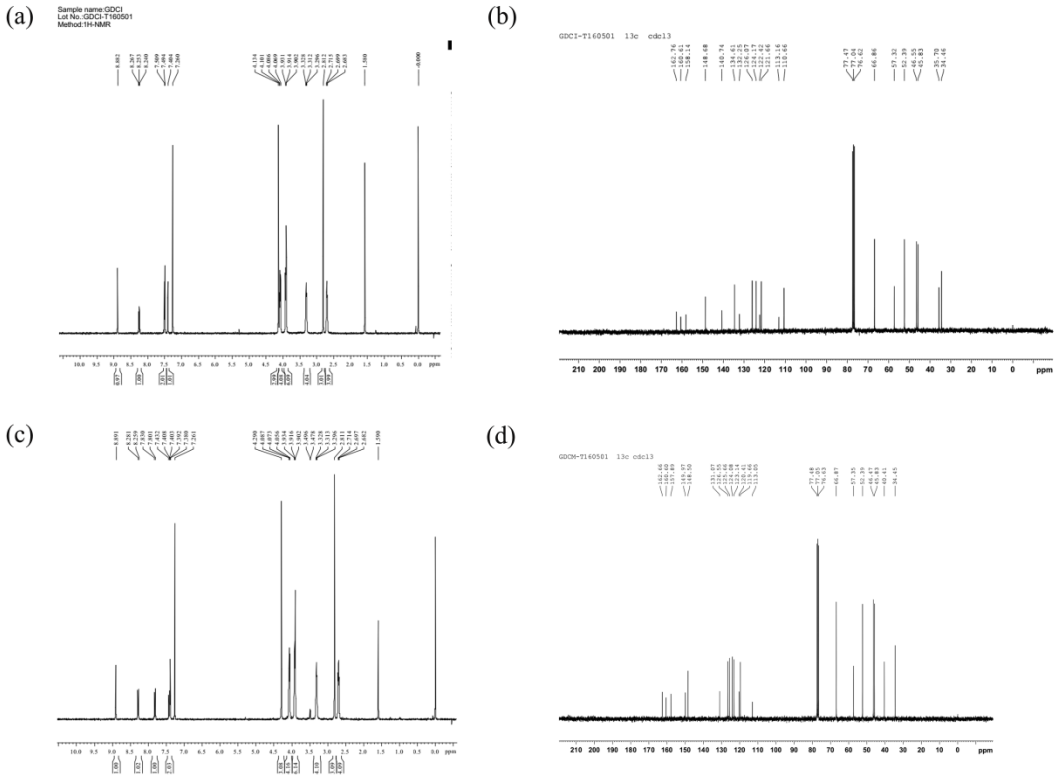

Figure S1: (a) and (b) showed the ^{1}H-NMR and ^{13}C-NMR of GDCI. (c) and (d) showed the ^{1}H-NMR and ^{13}C-NMR of GDCM.

NMR spectroscopy:

GDCI ^{1}HNMR(300MHz,$CDCl_3$) :

δ8.882(s,1H),δ8.253(t,J=4.05Hz,1H),δ7.494(d,J=4.5Hz,2H),δ7.404(s,1H),δ44.134(s,3H),δ4.086(t,J=4.8Hz,4H),δ3.914(t,J=5.1Hz,4H),δ3.902(s,2H),δ3.312(t,J=4.8Hz,4H), δ2.812(s,3H),δ2.699(t, J=4.8Hz,4H);

GDCI ^{13}C NMR($CDCl_3$):

δ162.76,160.61,158.14,148.68,140.74,134.61,132.25,126.07,124.17,122.42,121.66,113.16,110.66,77.47,77.04,76.62,66.86,57.32,52.39,46.55,45.83,35.70,34.46;

GDCM ^{1}HNMR(300MHz,$CDCl_3$):

δ8.891(s,1H),δ8.259(d,J=6.6Hz,1H),δ7.801(d,J=8.7Hz,1H),δ7.408(dd,J=7.2,8.7Hz,1H),δ7.380(s,1H),δ4.290(s,3H),δ4.073(t,J=4.65Hz,4H),δ3.916(t,J=4.8Hz,4H),δ3.902(s,2H),δ3.313(t,J=4.8Hz,4H), δ2.811(s,3H),δ2.697(t, J=4.8Hz,4H);

GDCM ^{13}CNMR($CDCl_3$):

δ162.66,160.60,157.89,149.97,148.50,131.07,126.55,125.66,124.08,123.14,120.41,11
9.66,113.05,77.48,77.05,76.63,66.87,57.35,52.39,46.47,45.83,40.41,34.45.

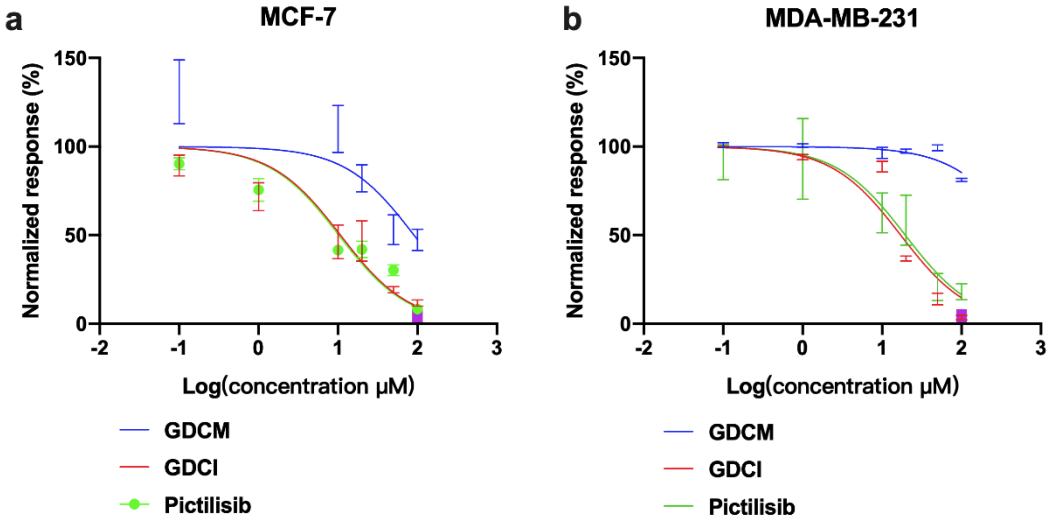

Figure S2 Normalized dose response of the drug for the two cell lines

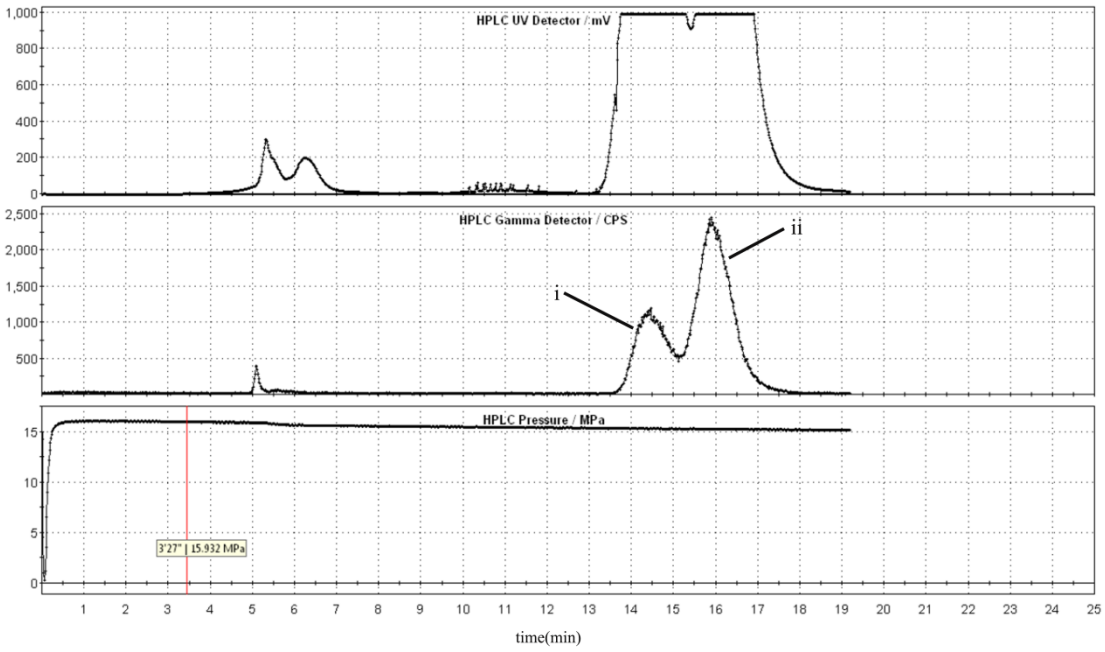

Figure S3: The reaction products were purified by semi-preparative HPLC. ⅰ was [^{11}C]-GDCM and ⅱ was [^{11}C]-GDCI.