

Fig. S1. Molecular structure of ZD6474



Fig. S2: Test setup for impedance measurement.



Fig. S3. Fabrication process flow and schematic of ECIS device: (i) Cleaned Pyrex wafer, (ii) thermally deposited Cr-Au film, (iii) patterned Cr-Au electrodes, (iv) SU8 coating, (v) patterned SU8 layer and (vi) attachment of cloning cylinder surrounding the electrode region, schematic of ECIS device.



Fig. S4. Real time monitoring of cytotoxicity of ZD6474 for (a) Design 2, (b) Design 3, and (c) Design 4.



Fig. S5. Bode plot for effects of ZD6474 on MBA-MB-231 cancer cells for (a) Design 2, (b) Design 3, and (c) Design 4.



Fig. S6. Bode plot for effects of ZD6474 on cell free medium for design 1. The same trend follows for all other designs.



Fig. S7. Dependence plot for drug doses in relation to (a) magnitude (b) phase angle.



Fig. S8. Inhibitory plot of ZD6474 in relation to (a) magnitude (b) phase angle.