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| Drugs | IC50/GI50/EC50 in breast cell lines | Target | References |
| BKM-120 | 0.486uM | pan-PI3K | <http://clincancerres.aacrjournals.org/content/early/2014/05/30/1078-0432.CCR-13-2769.full.pdf> supplementary table 1 |
| BYL71 | 2.94uM | PI3K alpha (if interested) | <http://clincancerres.aacrjournals.org/content/early/2014/05/30/1078-0432.CCR-13-2769.full.pdf> supplementary table 1  To buy: http://www.selleckchem.com/products/byl719.html |
| Bafilomycin | 1. ~0.8uM in HeLa 2. 5nm ~50% MCF7 & (SKBR3?) | Autophagy inhibitor (V-atpase inhibitor) | [http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0011629](https://www.umail.utah.edu/owa/redir.aspx?C=qvipChGMmEaxM18AnXYmVkQqMe0tYtIIeEdbNvV21KBEdDRcJb52ck0_bqMtiYWT5zutzjrGXFs.&URL=http%3a%2f%2fjournals.plos.org%2fplosone%2farticle%3fid%3d10.1371%2fjournal.pone.0011629" \t "_blank) Figure 1  <http://www.tandfonline.com/doi/pdf/10.4161/auto.7.9.1652> Figure 4A & <http://www.plosone.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pone.0006251&representation=PDF> Figure 6 |
| 3-MA | 2mM in MDA-MB468 (we don’t have this cell line)  5mM for SKBR3 | Autophagy inhibitor+PI3K/AKT inhibitor | <http://www.biomedcentral.com/content/pdf/1471-2407-14-273.pdf> Figure 4  <http://www.plosone.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pone.0006251&representation=PDF> Figure 6 Bafilomycin and 3MA viability assay |
| UMI-77 | 3.4-4.4 uM in pancreatic cell lines (BxPC3 and Panc 1)  We didn’t find anything on breast cell lines | MCL-1 inhibitor | <http://mct.aacrjournals.org/content/13/3/565.long> This article is very similar to what we are trying to do but in pancreatic cells. I think our drug assay will address many things they pointed out for future studies. |

**IC50 Selection process for drug assay:** First, the drugs available in ICBP were used for calculating mean GI50 concentration for ‘sensitive’ and all breast cell lines (n=25) that we are growing for drug screening assay. ‘Sensitive’ cell lines are defined as having GI50 less than the mean GI50s available from ICBP Daemen et al. Second, for the drugs available in GDSC, all available breast cancer cell lines were used for calculating IC50. Mean of all available breast cell lines IC50s for a specific drug was used to determine the cut of for “sensitive” cell lines. Then, the average of IC50s was calculated just for the “sensitive” cell lines. Reported IC50/EC50/GI50s in published studies were used to identify a drug assay concentration range and validated in pilot assays for the drugs ABT 263 and obatoclax by Sam; UMI-77, bafilomycin, 3-MA by Gaju’s pilot. IC25, 35, 65 or 75 were calculated using a web tool available at <http://www.graphpad.com/quickcalcs/Ecanything1.cfm>.