

KRISHGEN BioSystems

DO'S AND DON'T'S FOR CYPEX BACTOSOMES

- Bactosomes must be mixed by just flicking the vial or pipetting the enzyme up and down several times. Vortexing is not recommended since it lowers activity.
- Bactosomes must be stored at -70 Degrees Celsius.
- The CYPs must be diluted in storage buffer as detailed on the data sheet for aliquotting and refreezing. They are not stable in assay buffer when refrozen and PLEASE NOTE the activity will be lost.
- AGAIN PLEASE NOTE for diluting CYP Bactosomes, storage buffer should be used. Bactosomes should be diluted at the last minute before adding to assay because diluted Bactosomes are unstable without the substrate.
- Protein content varies from lot to lot of Bactosomes. This is because CYPs are sold by us in concentrated form so that there is more room for adding the compound under test.
- If P450 concentration is lower then it means that the protein concentration is higher. The amount must be calculated from the P450 concent and not the total protein concentration.
- The high reductase enzymes are more active so you are more likely to see minor metabolites with these enzymes. This should give you a good idea as to whether the drug candidates are substrates for the CYPs and what metabolites you may expect to be made when the drug is broken down.
- Care must be taken not to over-interpret the results using recombinant CYPs. As the activity is higher in these than in human liver, you may, on some occasions, see some very minor metabolites with the recombinant enzymes that are not seen in humans.

It should also be borne in mind that the reaction catalyzed by the high reductase enzymes is linear for a shorter period than the same reaction being catalyzed by the low reductase enzyme.

