**FIGURE 1**

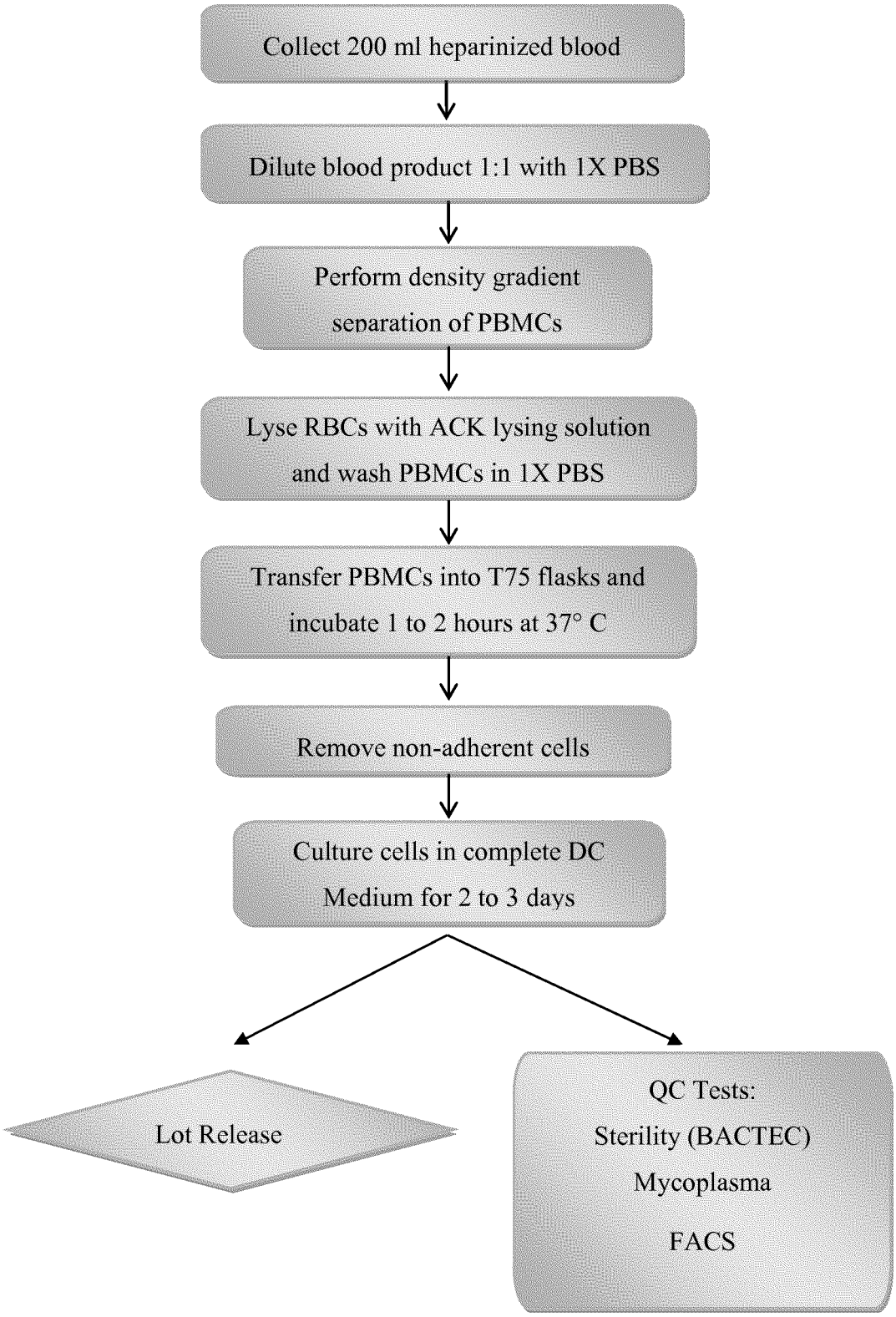

Collect 200 ml heparinized blood
Dilute blood product 1:1 with 1X PBS
Perform density gradient separation of PBMCs
Lyse RBCs with ACK lysing solution and wash PBMCs in 1X PBS
Transfer PBMCs into T75 flasks and incubate 1 to 2 hours at 37° C
Remove non-adherent cells
Culture cells in complete DC Medium for 2 to 3 days
Lot Release
QC Tests:
Sterility (BACTEC)
Mycoplasma
FACS

**FIGURE 2**

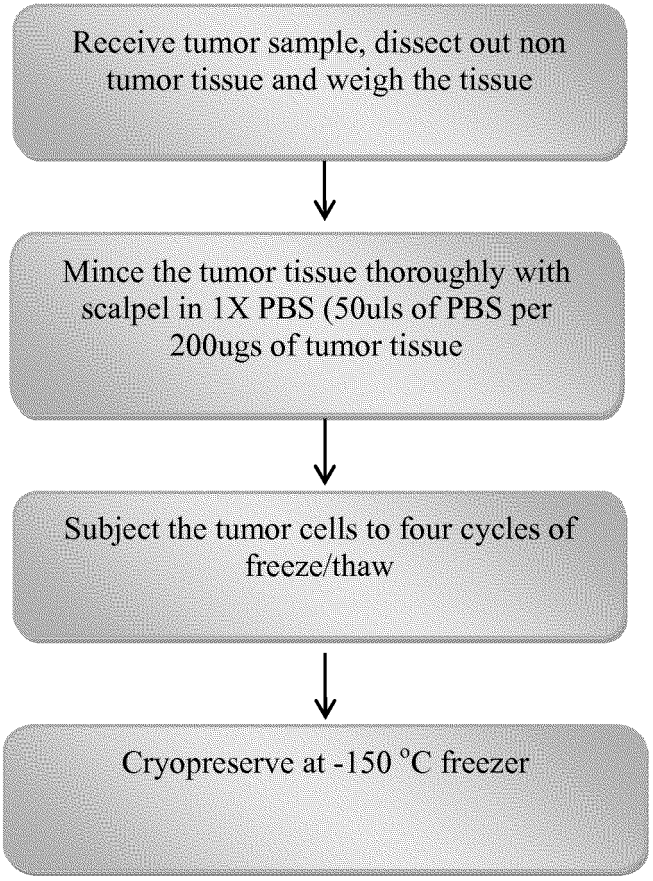

Receive tumor sample, dissect out non tumor tissue and weigh the tissue
Mince the tumor tissue thoroughly with scalpel in 1X PBS (50uls of PBS per 200ugs of tumor tissue
Subject the tumor cells to four cycles of freeze/thaw
Cryopreserve at -150 °C freezer

**FIGURE 3**

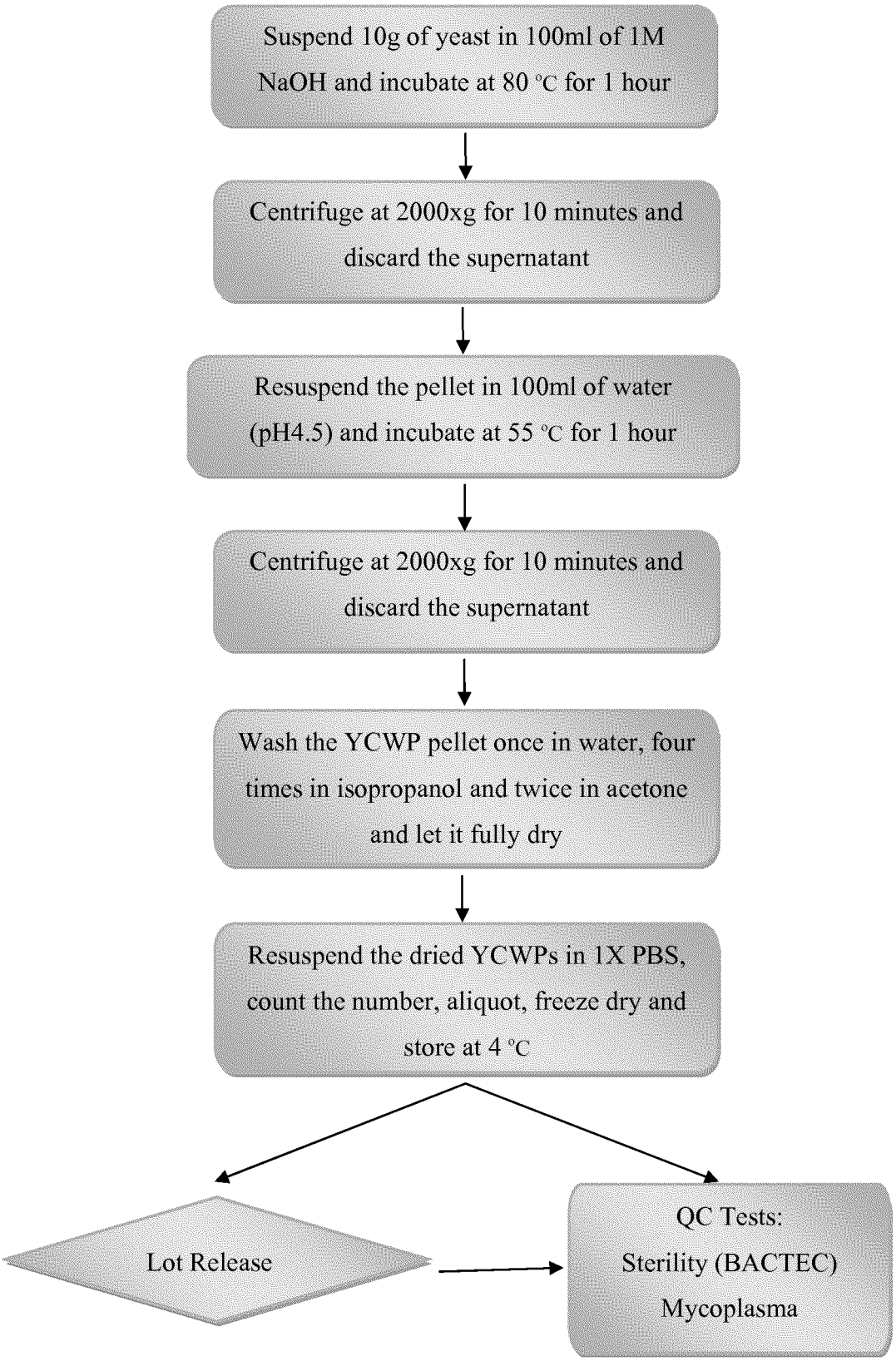

Suspend 10g of yeast in 100ml of 1M NaOH and incubate at 80 °C for 1 hour
Centrifuge at 2000xg for 10 minutes and discard the supernatant
Resuspend the pellet in 100ml of water (pH4.5) and incubate at 55 °C for 1 hour
Centrifuge at 2000xg for 10 minutes and discard the supernatant
Wash the YCWP pellet once in water, four times in isopropanol and twice in acetone and let it fully dry
Resuspend the dried YCWPs in 1X PBS, count the number, aliquot, freeze dry and store at 4 °C
Lot Release
QC Tests:
Sterility (BACTEC)
Mycoplasma

**FIGURE 4**

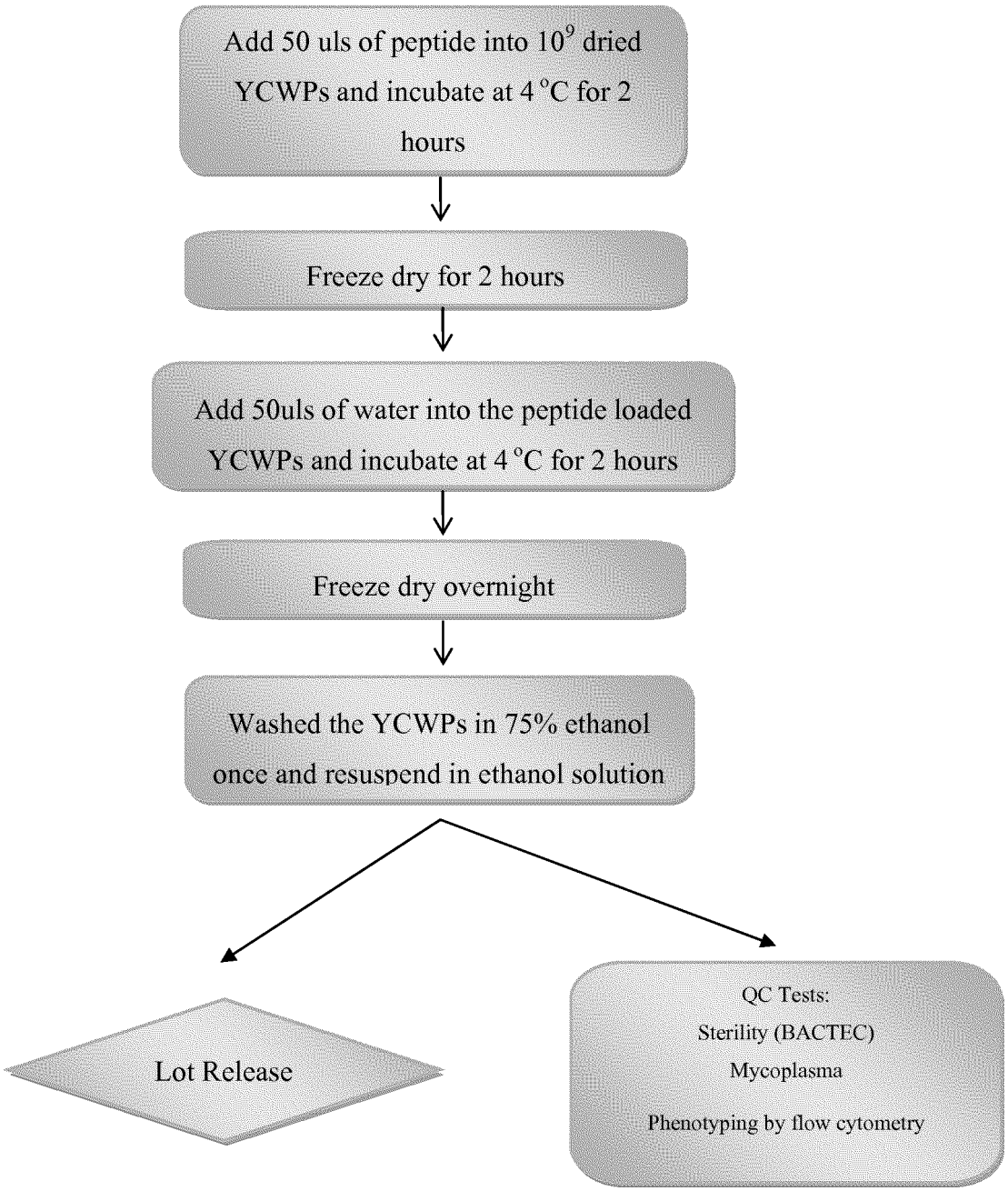

Add 50 uls of peptide into $10^9$ dried YCWPs and incubate at 4 °C for 2 hours
Freeze dry for 2 hours
Add 50uls of water into the peptide loaded YCWPs and incubate at 4 °C for 2 hours
Freeze dry overnight
Washed the YCWPs in 75% ethanol once and resuspend in ethanol solution
Lot Release
QC Tests:
Sterility (BACTEC)
Mycoplasma
Phenotyping by flow cytometry

**FIGURE 5**

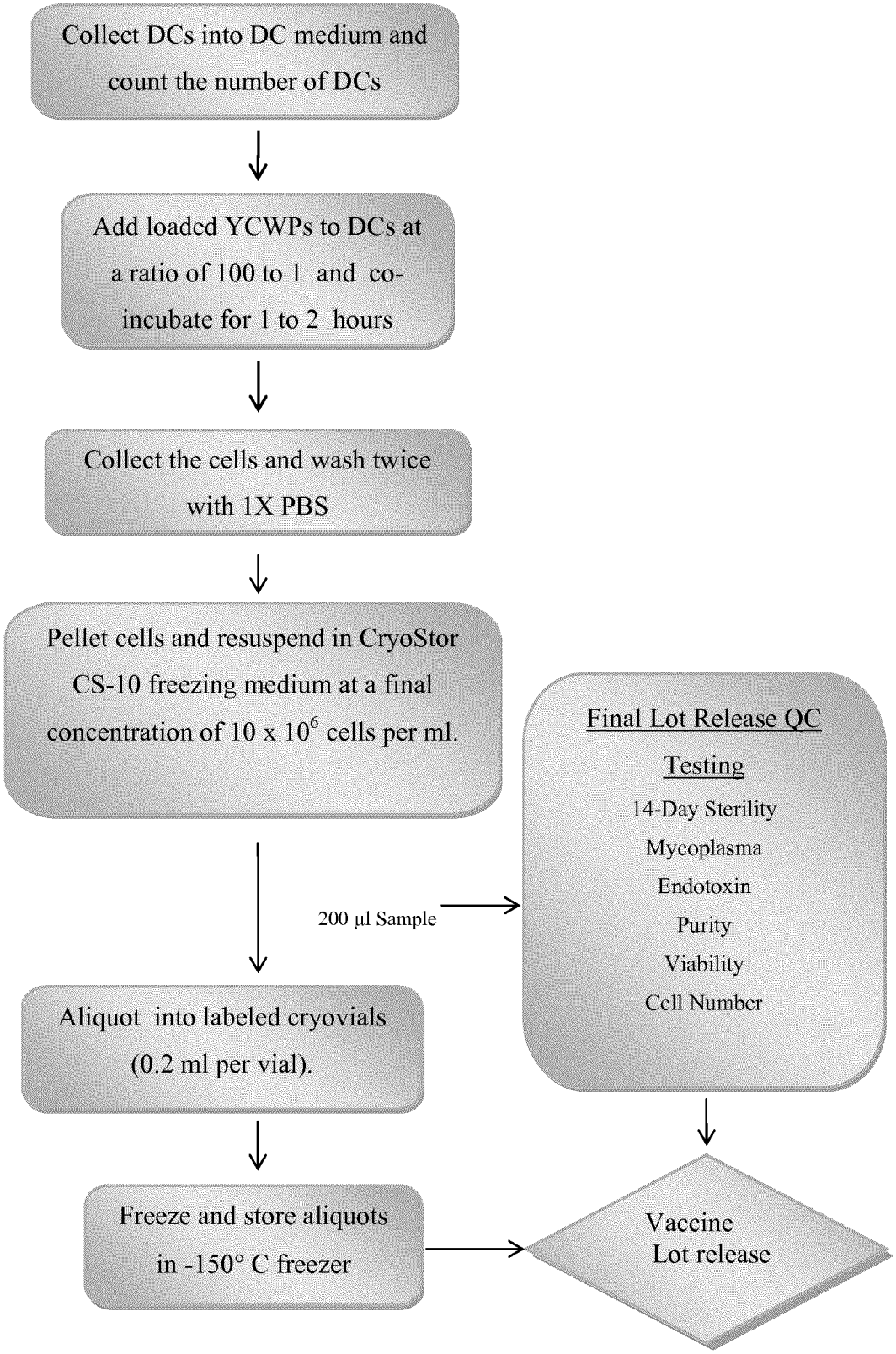

Collect DCs into DC medium and count the number of DCs
Add loaded YCWPs to DCs at a ratio of 100 to 1 and co-incubate for 1 to 2 hours
Collect the cells and wash twice with 1X PBS
Pellet cells and resuspend in CryoStor CS-10 freezing medium at a final concentration of 10 x 10^6 cells per ml.
200 µl Sample
Final Lot Release QC Testing
14-Day Sterility
Mycoplasma
Endotoxin
Purity
Viability
Cell Number
Aliquot into labeled cryovials (0.2 ml per vial).
Freeze and store aliquots in -150° C freezer
Vaccine Lot release

FIGURE 6A

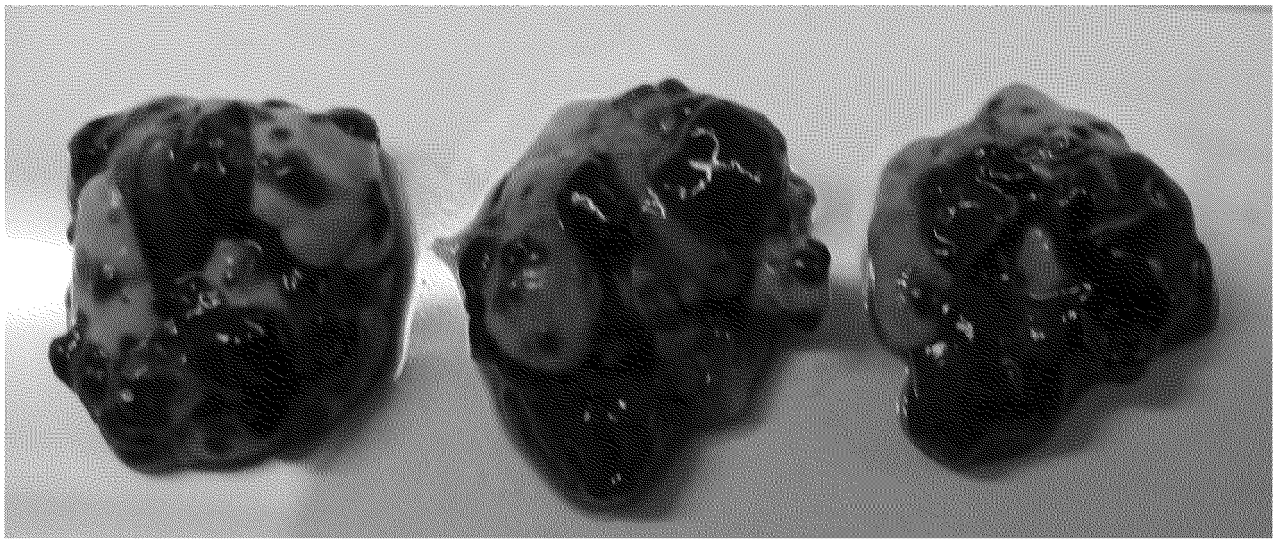


FIGURE 6B

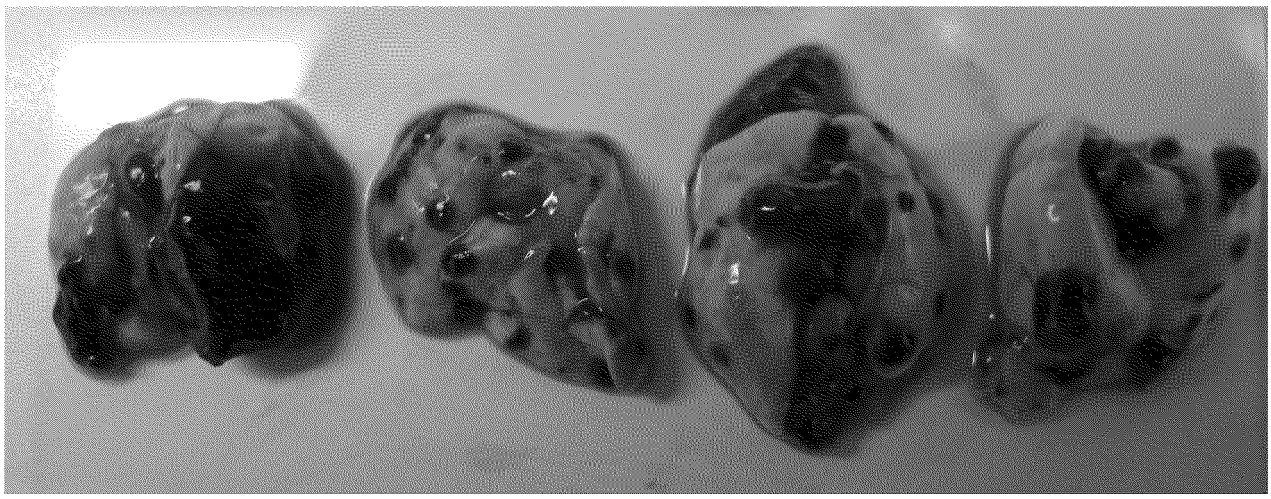


**FIGURE 6C**

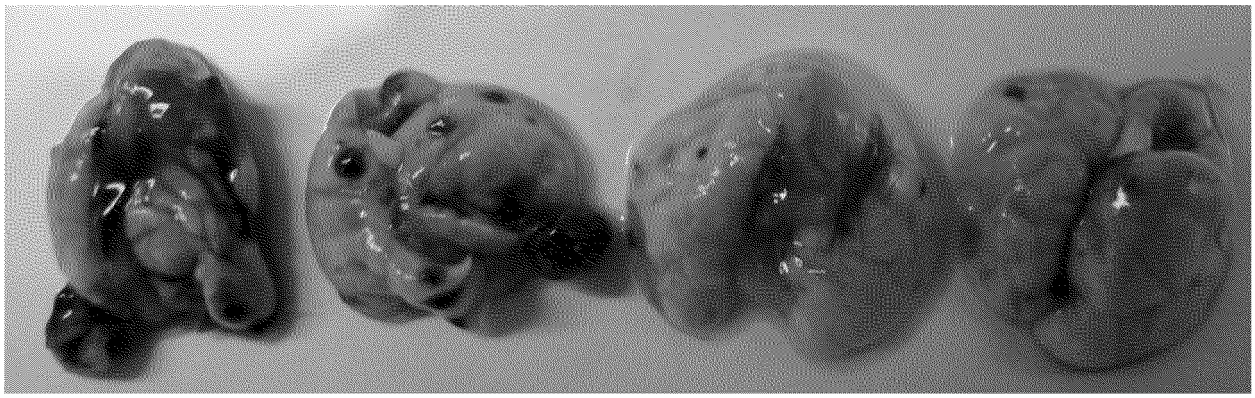
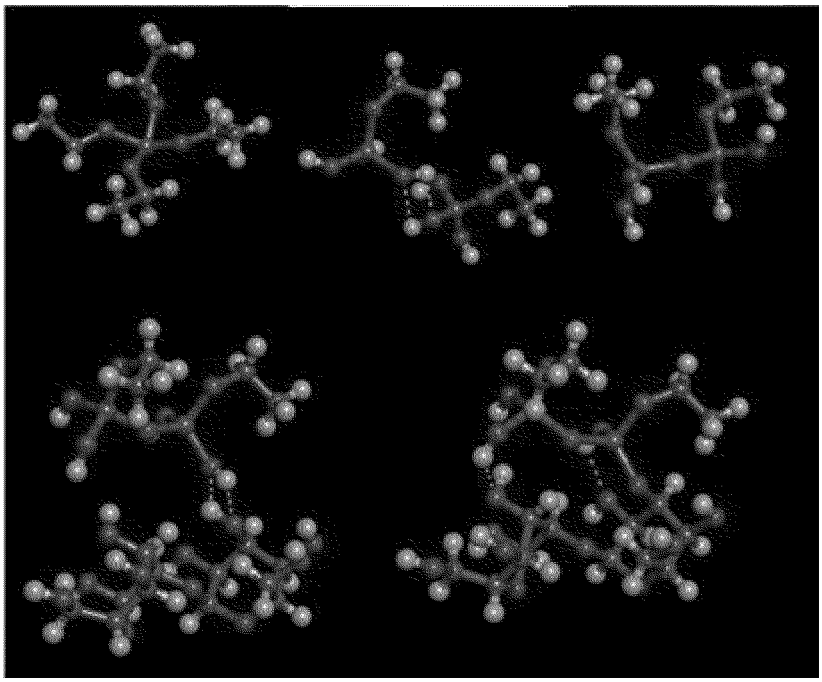


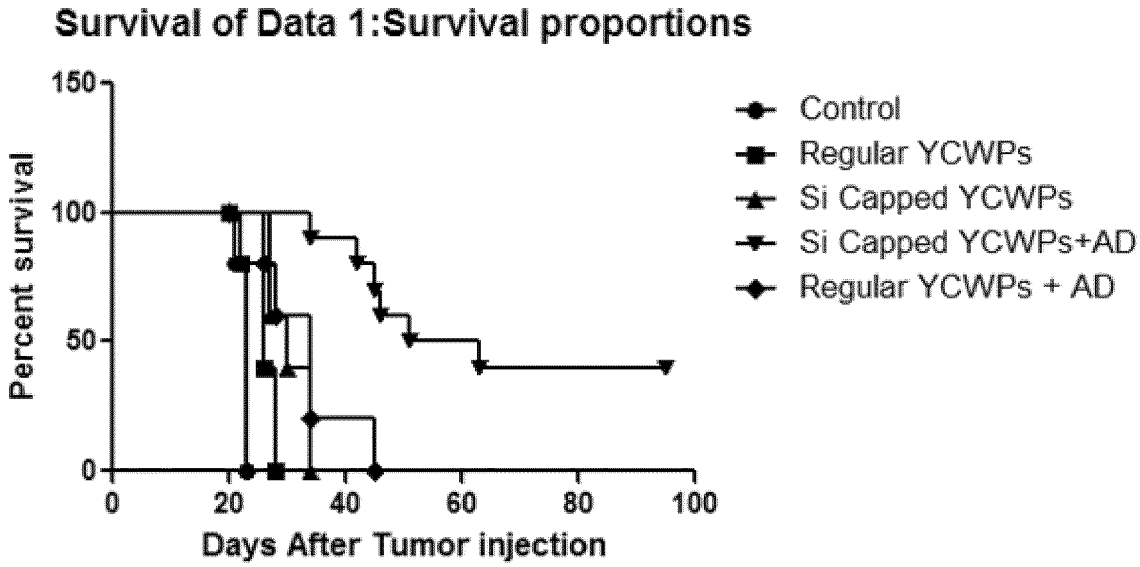
FIGURE 7

A B C



D E

**Figure 8**


Survival of Data 1:Survival proportions
Percent survival
150
100
50
0
0
20
40
60
80
100
Days After Tumor injection
Control
Regular YCWPs
Si Capped YCWPs
Si Capped YCWPs+AD
Regular YCWPs + AD