

1. Product: Cell Culture Square Bottle

SPL Life Sciences provides Cell Culture Square Bottles, suitable for animal cell and microbial suspension culture. The shape of the bottle is specially designed to cause turbulent flow of media when physically swirled for more effective solution mixing and oxygen supply. The square bottles are provided in four different volumes and they are all sterilized before the release.



2. Experimental condition

- 1) Cell line: K562(ATCC® CCL-243, human lymphoblast) or CHO(DN001, stable cell line)
- 2) Cell density: $2.5 \sim 7.5 \times 10^5$ cells/ml
- 3) Media: DMEM supplemented with 10 % FBS and 1 % antibiotics or in-house media(by the third laboratory)
- 4) Maintained on orbital shaker at specified rpm under 37°C humidified condition

3. Results

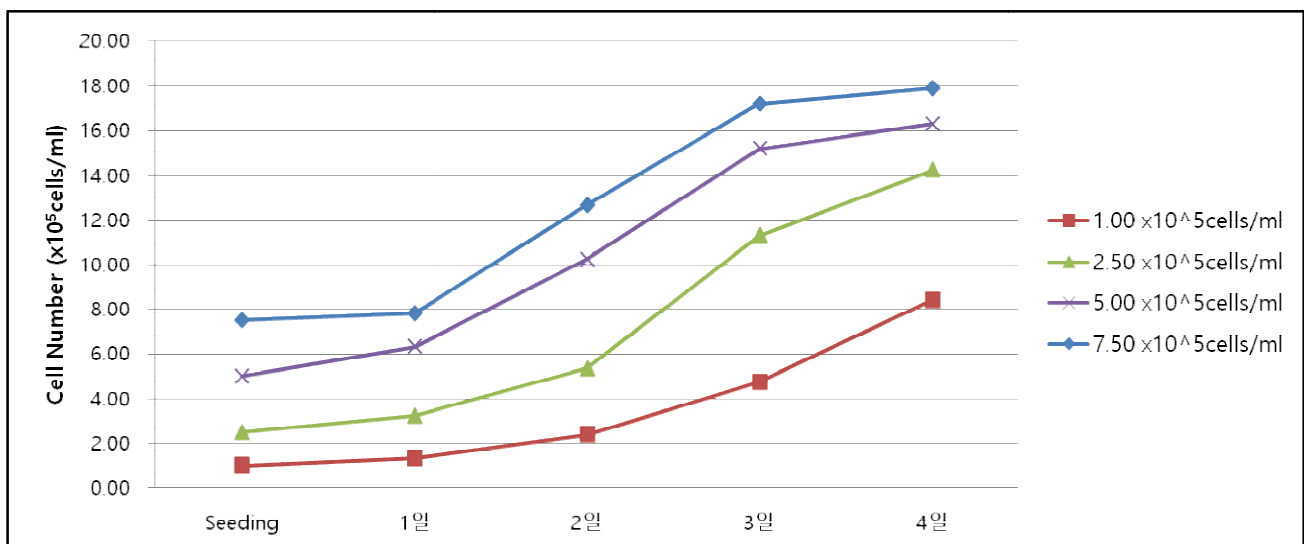


Figure.1 K562 cells were cultured in 250ml SPL Cell Culture Square Bottle on orbital shaker at 110rpm for 96 hours according to the seeding densities

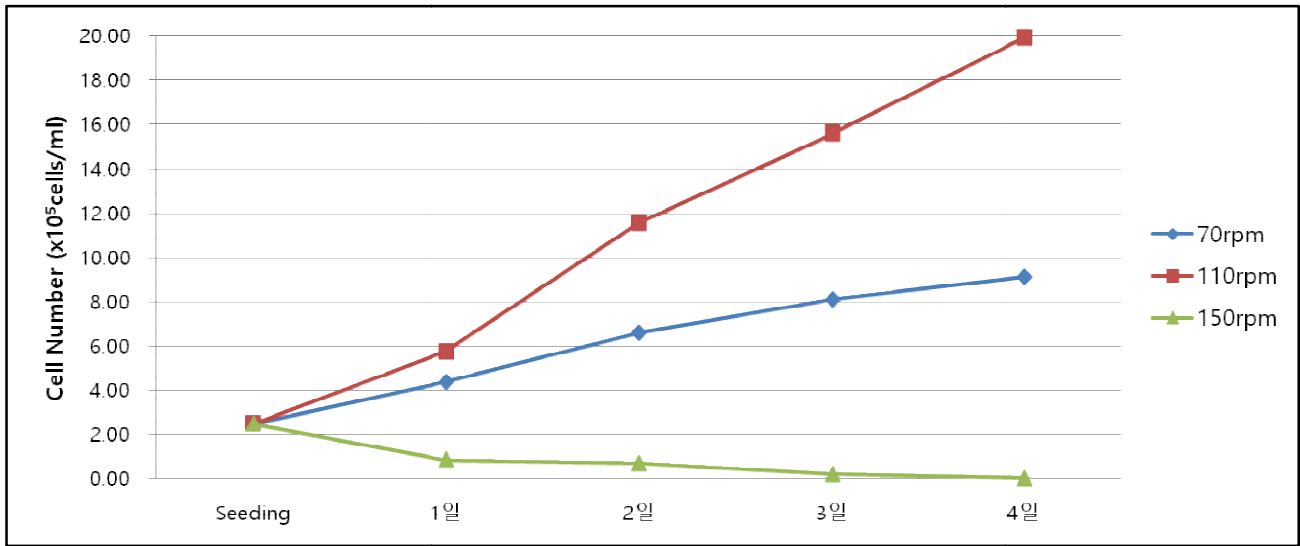


Figure.2 K562 cells were cultured in 250ml SPL Cell Culture Square Bottle for 96 hours with seeding density of 2.5×10^5 cells/ml on orbital shaker at specified rpm

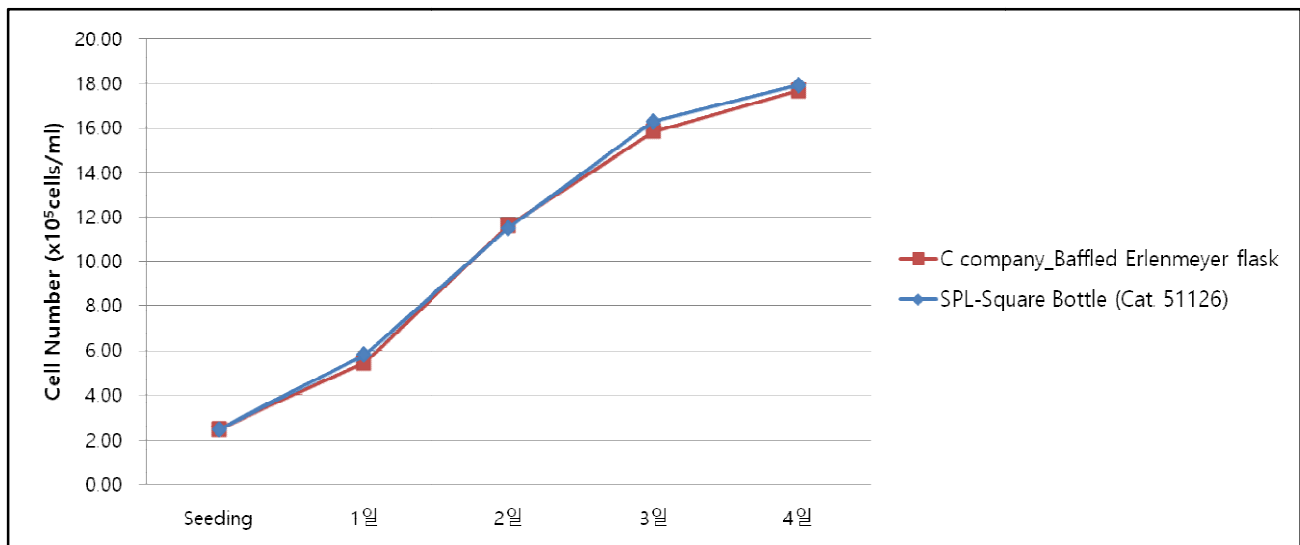
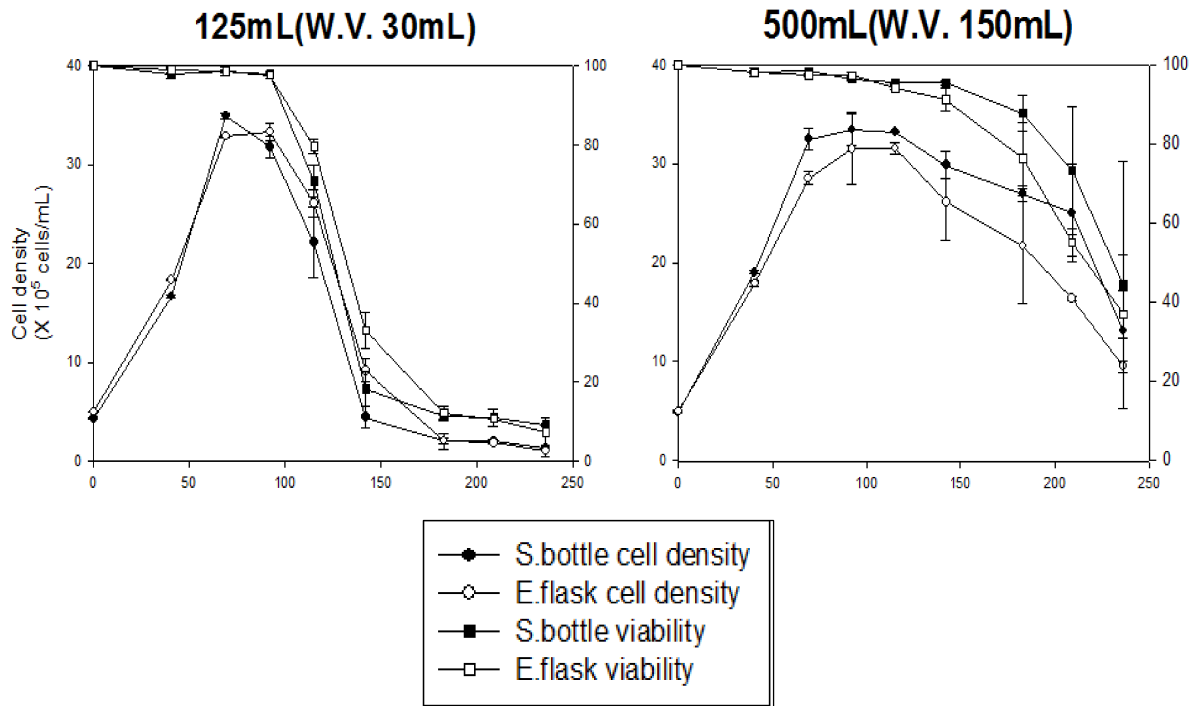


Figure.3 K562 cells were cultured in 125ml SPL Cell Culture Square Bottle for 96 hours on 110 rpm orbital shaker with seeding density of 2.5×10^5 cells/ml



		Competitor's Erlenmeyer flask	SPL Square bottle
Maximum cell density (X 10 ⁵ cells/mL)	125mL	33.3	34.9
	500mL	31.6	33.5
	1L	31.5	30
K _L a (h ⁻¹)	125mL	23.4	20.9
	500mL	13.0	16.6
	1L	11.2	10.1

Figure.4 CHO cells were cultured in SPL Cell Culture Square Bottle or Competitor's Erlenmeyer flask for 10 days on 110 rpm by the third laboratory

4. Conclusion

SPL Cell Culture Square Bottle showed a performance rate as high as the competitor's products.

5. Ordering Information

Cat.No	Material (Body/Cap)	Cap type	Total volume (ml)	Sterile	Packaging
51125	PET/HDPE	Plug	125	+-	1/36
51126	PET/HDPE	filter	125	+-	1/36
51250	PET/HDPE	Plug	250	+-	1/30
51251	PET/HDPE	filter	250	+-	1/30
51500	PET/HDPE	Plug	500	+-	1/15
51501	PET/HDPE	filter	500	+-	1/15
51000	PET/HDPE	Plug	1000	+-	1/8
51001	PET/HDPE	filter	1000	+-	1/8

www.spllifesciences.com

For technical assistance, contact SPL R&D Center at:

Tel: +82-31-533-4800; Fax: +82-31-533-1430; e-mail: spl@ispl.co.kr

To place an order, contact your local distributor or

Tel: +82-31-533-4800; Fax: +82-31-533-1430; e-mail: business@ispl.co.kr