



Premium Grade Fetal Bovine Serum

According to USP 43 <90>, the assessment of fetal bovine serum (FBS) quality should not only focus on the biochemical profile but also include functional tests that evaluate FBS's ability to support cell growth. These tests are essential for ensuring that FBS meets the necessary performance standards for cell culture applications. The cell growth curve is one of the methods for reflecting the performance of fetal bovine serum (FBS).

Therefore, we have collaborated again with Suzhou Soochow University to use LUXCELL fetal bovine serum and imported control serum G respectively for the resuscitation and subculturing of various cell lines. Through CCK-8 assays, we plotted growth curves at different densities to evaluate the cell growth capacity of LUXCELL premium fetal bovine serum.

Test Results from Suzhou Soochow University

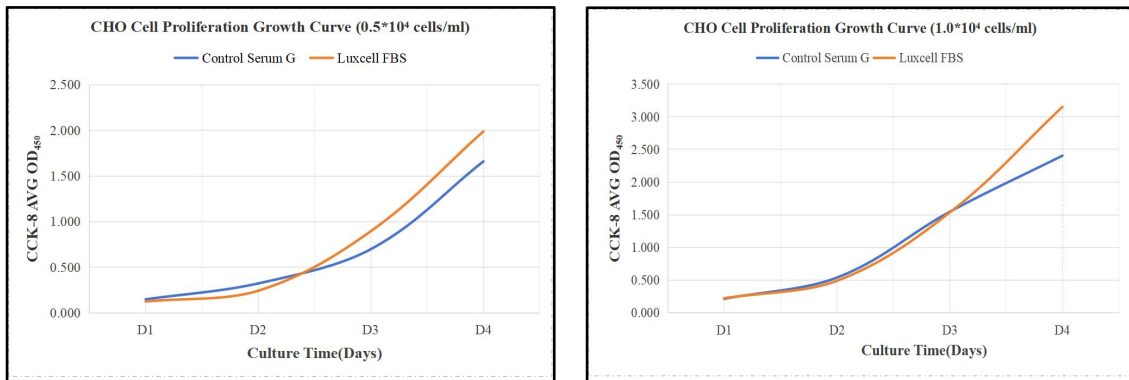


Fig.1. Comparison of LUXCELL FBS and imported control serum G in CHO cells growth curves, with cell densities of 0.5*10⁴/ml and 1.0*10⁴/ml. Each group has at least three replicates, and all data are expressed as average OD values.

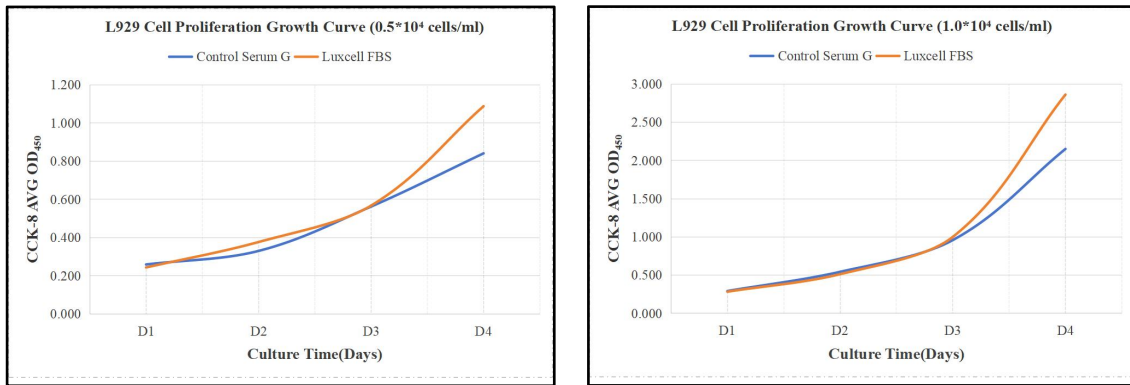


Fig.2. Comparison of LUXCELL FBS and imported control serum G in L929 cells growth curves, with cell densities of 0.5*10⁴/ml and 1.0*10⁴/ml. Each group has at least three replicates, and all data are expressed as average OD values.

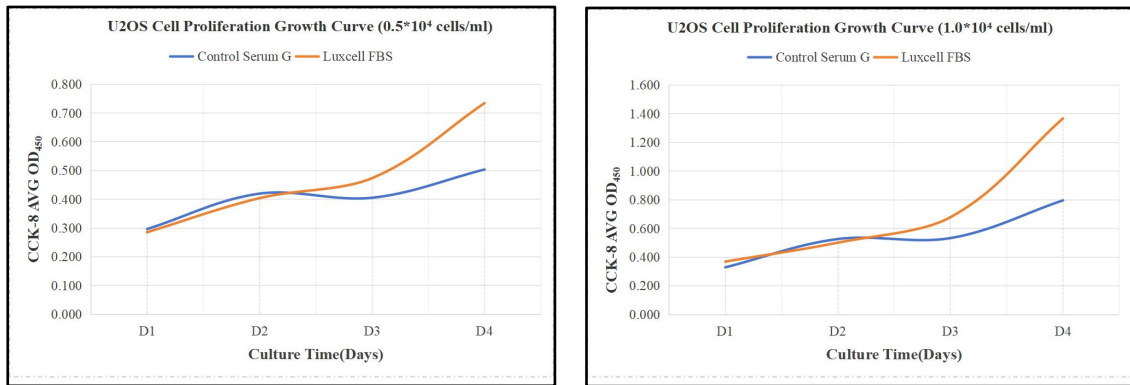


Fig.3. Comparison of LUXCELL FBS and imported control serum G in U2OS cells growth curves, with cell densities of 0.5*10⁴/ml and 1.0*10⁴/ml. Each group has at least three replicates, and all data are expressed as average OD values.

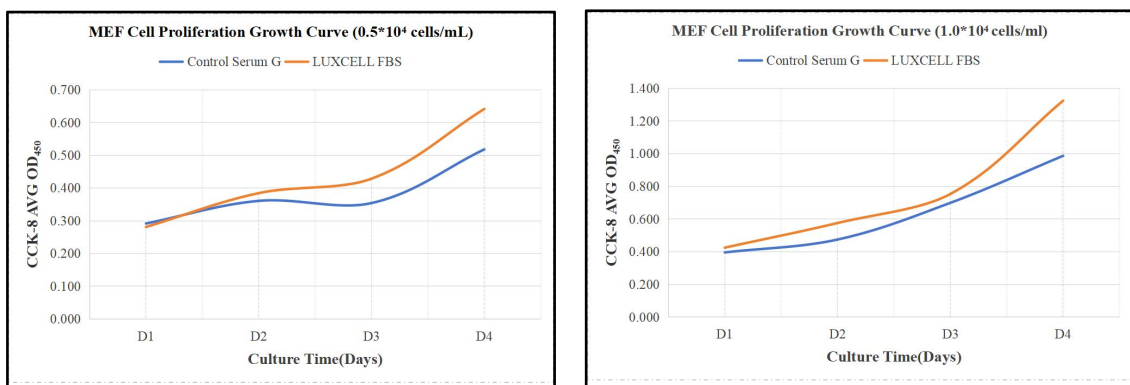


Fig.4. Comparison of LUXCELL FBS and imported control serum G in MEF cells growth curves, with cell densities of 0.5*10⁴/ml and 1.0*10⁴/ml. Each group has at least three replicates, and all data are expressed as average OD values.

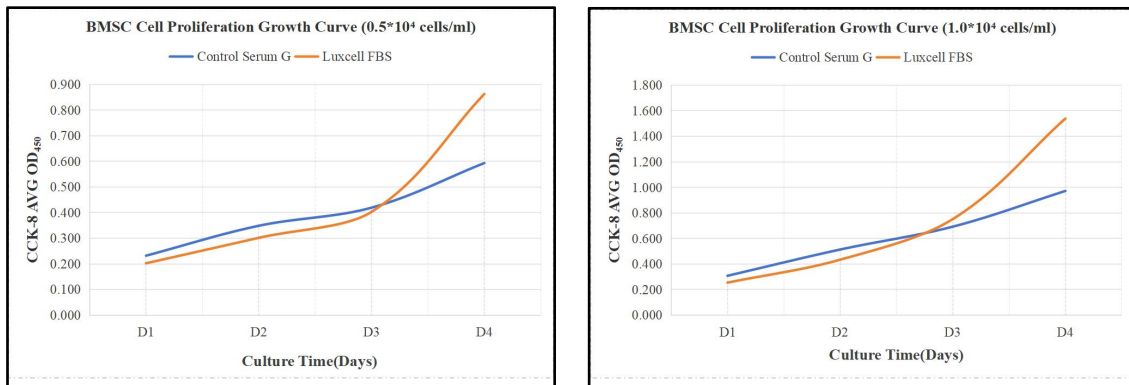


Fig.5. Comparison of LUXCELL FBS and imported control serum G in BMSC cells growth curves, with cell densities of 0.5*10⁴/ml and 1.0*10⁴/ml. Each group has at least three replicates, and all data are expressed as average OD values.

Note: The Luxcell FBS tested by Soochow University is Luxcell's premium grade fetal bovine serum, not irradiated.



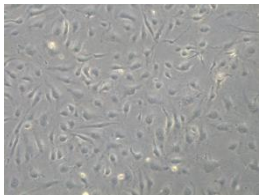
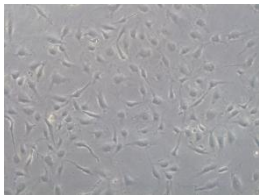
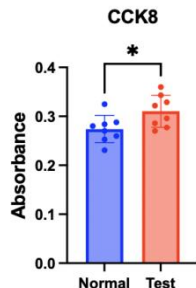
Premium Grade Fetal Bovine Serum

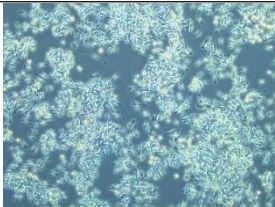
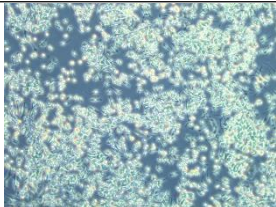
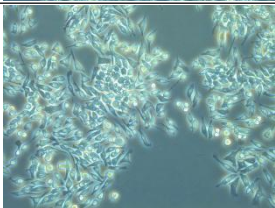
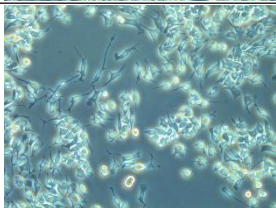
In addition, we also collaborated with Shanghai Fudan University to screen for more applicable cell lines, including primary cells and immune macrophage cell. The results indicate that when using LUXCELL irradiated FBS for culturing sensitive and difficult-to-cultivate macrophages, the cell morphology closely resembles that of the positive control serum M, with no obvious differentiation observed, and the cell growth rate is also similar.

Further testing experiments are still underway, and we will continue to provide updates.

Test Results from Shanghai Fudan University

Cell Lines	Cell Density	CCK-8 test results - Average OD value	
		Standard FBS*	Positive Control - A leading international Brand M
Rat Primary Astrocytes	$2 \times 10^4/\text{ml}$	0.3466	0.1294
Representative Images	Magnification $4\times$		

Cell Lines	Standard FBS* (Test)	Positive Control - A leading international Brand M (Normal)	Comparison of CCK-8 results
Human Umbilical Vein Endothelial Cells HUVEC Representative Images			 CCK8 Absorbance Normal Test

Cell Lines	Magnification	Irradiated FBS**	Positive Control - A leading international Brand M
Mouse Mononuclear Macrophages Cells RAW264.7 Representative Images	10×		
	25×		

The asterisk (*) represents Luxcell's premium grade fetal bovine serum.

The asterisk (**) represents Luxcell's irradiated premium grade fetal bovine serum.