

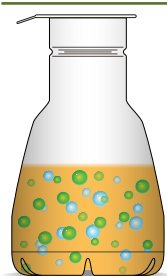


ULTRA YIELD™ FLASK PATENTED

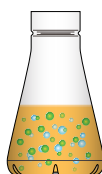


Key Features

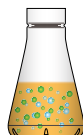
- 10x Increased Aeration Over Standard Shake Flasks
- Flasks That Function As Disposable Fermentors
- Replacement For Glass Flasks
- Fit All Standard Flask Clamps
- Elevated Cell Production
- Increased DNA & Protein Production
- Easily Adaptable Into Microbial Growth Protocols
- Sterile, Disposable, Single-Use Flasks From 125mL - 2.5L
- Fully Scalable Results



2.5L | Part No. 931136-B
Seal | Part No. 899425



500mL | Part No. 931141
Seal | Part No. 899424



250mL | Part No. 931144
Seal | Part No. 899423



125mL | Part No. 931147
Seal | Part No. 899421



AirOtop Enhanced Seal™

Ultra Yield™ Flask

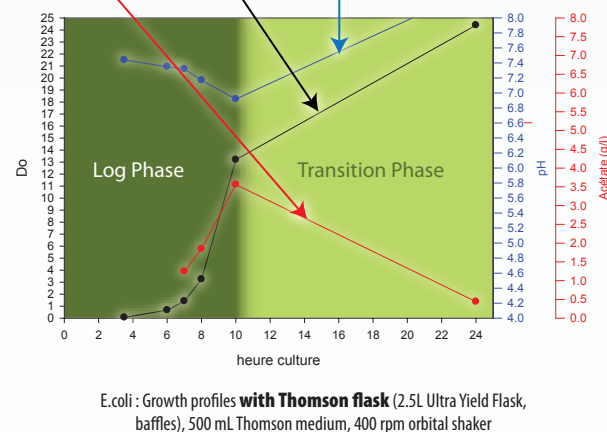
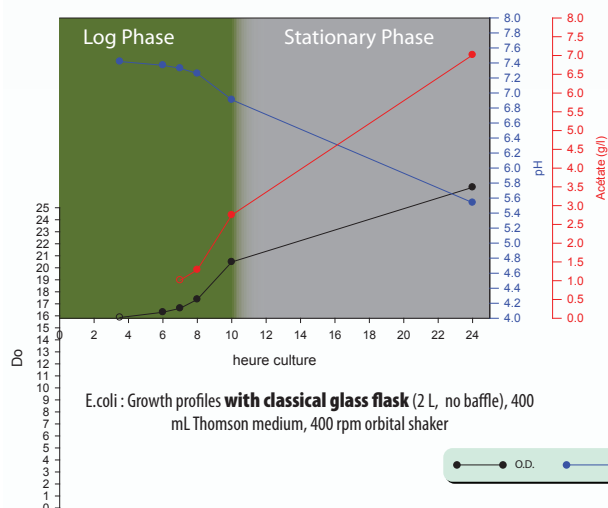
Patent US #7,709,251 UK #2433255



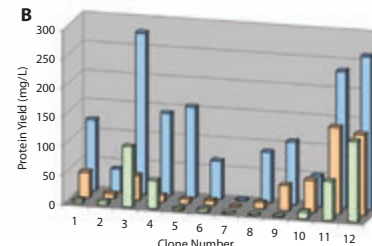
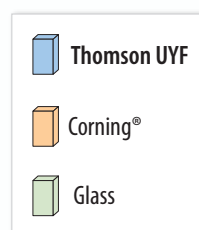
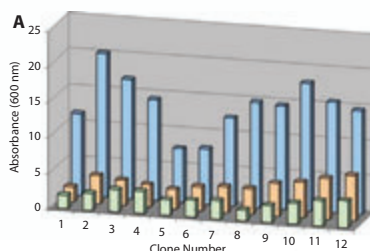
GlaxoSmithKline

Drop In Acetate

Improved Growth Stable pH



ULTRA YIELD™ 610% Yield Increase*



610% Yield Increase*

Effect of flask design on E. coli culture growth and production of recombinant protein. (A) The effect of flask type and growth medium on the observed optical densities of the cultures at A600 following overnight protein expression. Cultures carried out in Fernbach flasks using either LB medium or TB medium are shown, respectively, at the front (green) and in the center (orange). Cultures grown in Ultra Yield™ flasks in TB medium are shown at the back (blue). (B) The yields of expressed soluble protein (determined by protein assay and recorded as mg protein per liter of expression culture) from the IMAC columns following purification of the twelve polyHis-tagged recombinant proteins, each expressed under the three conditions described in Panel A. Clone locations in Panel B are the same as those in Panel A.

*Economical parallel protein expression screening and scale-up in Escherichia coli. Journal of Structural and Functional Genomics 2006 Jun;7(2):101-8. Epub 2006 Dec 23.

Part Numbers & Recommended Speeds:

Recommended culture volumes and orbital shaker speeds (a throw of 1" is generally used for orbital shaking):

Part #	Media (mL)/Flask	Shaker Speed
931147 125mL Ultra Yield Flask 50/case -- Sterile <i>Please cover the flask with AirOtop seals 899421.</i>	40-50mL/flask	300-350 RPM
931144 250mL Ultra Yield Flask 50/case -- Sterile <i>Please cover the flask with AirOtop seals 899423.</i>	75-110mL/flask	300-350 RPM
931141 500mL Ultra Yield Flask 25/case -- Sterile <i>Please cover the flask with AirOtop seals 899424.</i>	125-200mL/flask	300-350 RPM
931136-B 2.5L Ultra Yield Flask 6/case -- Sterile <i>Please cover the flask with AirOtop seals 899425.</i>	500mL (optimum)	300-400 RPM
931154 2.5L Ultra Yield Flask w/ Cap 6/case -- Sterile	500mL	300-400 RPM