

Turbo Broth™ and Turbo Prime Broth™

Turbo Broth™ and Turbo Prime Broth™ are proprietary media formulations used for the cultivation of recombinant strains of *E. coli*. Turbo Prime Broth™ is made without animal-derived raw materials and is *APF Certified*. These media have been developed to improve the yield of recombinant proteins. The carbon source is glycerol which is not metabolized into acetic acid. It has a rich nutrient base which provides amino acids, vitamins, inorganic and trace minerals at levels higher than those of LB Broth. The medium is buffered at pH 7.2±0.2 with potassium phosphate to prevent a change in pH and to provide a source of phosphate. These modifications permit higher cell yields than can be achieved with LB. For expression of recombinant proteins, induction should be done at cell densities three times that of LB Broth. Cell yields are typically 4 to 5 times that of LB Broth in shake flask cultures depending on the characteristics of the strain. Plasmid copy numbers are higher, which can also enhance protein expression. This medium is suitable as the base for fermentation cultures. Biomass yields will depend on the process employed and the strain. A typical bench-scale fermentation operated in a batch mode with an air feed can achieve an OD₆₀₀ of 10 to 12 depending on the strain.

Turbo Broth™	Powder	0104	500 g
	Liquid, Ready-to-Use	0115	5 x 500 ml
Turbo Prime Broth™	Powder	0110	500 g
	Liquid, Ready-to-Use	0120	5 x 500 ml