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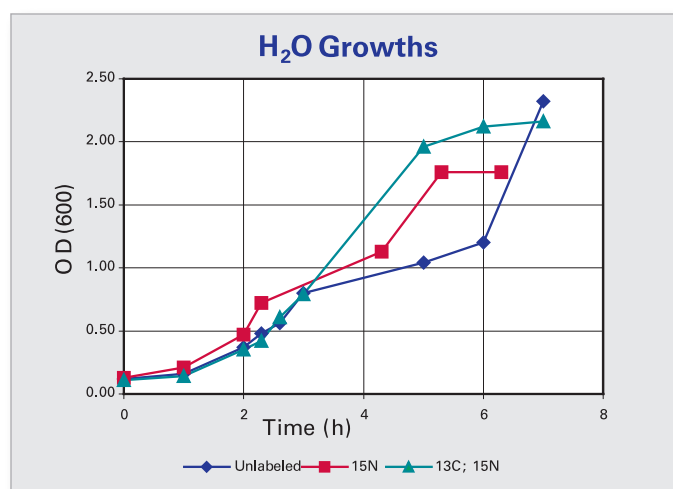
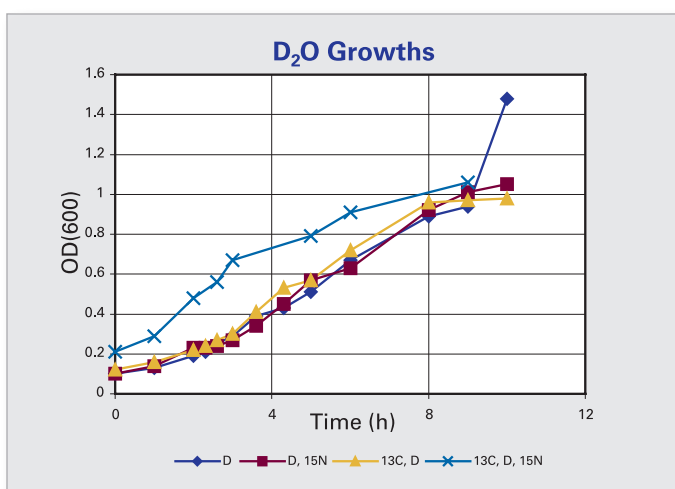
Cambridge Isotope Laboratories, Inc.
www.isotope.com

RESEARCH PRODUCTS

BioExpress® 1000

Growth, Protein Expression and Isotope-Incorporation Study

BioExpress® Growth Curves – *E. coli* BL21 with pFAF2 Plasmid (pQE Derivative; T5 Promoter)



- All cultures were inoculated with a preculture grown on the same medium at 37°C.
- Induction with 1 mM IPTG began at an OD between 0.6 and 0.8, and the temperature was decreased to 30°C for further four hours.

- After cultivation the cells were collected, disintegrated, and the His tagged target protein was purified via an MC column.
- The protein was characterized by SDS page, spectroscopic determination at 280nm and MALDI.

Protein Expression and Isotope-Incorporation Data His-Tagged Human FAF Domain, 125 Amino Acid Residues, 14257 D Molecular Weight

BioExpress® 1000	Protein Mass (MALDI MS)	% Incorporation	OD @ 4 h	Protein Yield (5 mL)	Calc. Yield (mg/L)	Purified Protein Soluble Fraction
Unlabeled	14255	0	2.3	1	200	
¹⁵ N Labeled	14429	97	1.8	1.2	240	
¹³ C, ¹⁵ N Labeled	15042	96.5	2.2	0.7	140	
D Labeled	15018	98	1.5	0.3	60	
¹⁵ N, D Labeled	15147	98	1	0.5	100	
¹³ C, D Labeled	15550	96.5	1	0.3	60	
¹³ C, ¹⁵ N, D Labeled	15753	98	1	0.6	120	