

Celtone[®] Plus Base Powder

E. coli Expression Aid for Deuterated Protein

Tired of low yields when expressing deuterated protein? Try adding Celtone[®] Plus base powder to your minimal media!

Cambridge Isotope Laboratories, Inc. (CIL) has developed an improved bacterial cell growth medium additive, called Celtone[®] Plus, for use in the recombinant production of deuterated protein. These new formulations outperform the current Celtone[®] formulation with respect to ease of use and overall protein yield.

Did you know...

- Up to a **100% increase in protein yield** has been reported when Celtone[®] Plus powder is added to minimal media at a concentration of 10 g/L.
- Celtone[®] Plus contains uniformly enriched amino acids and peptides along with a collection of nutrients that promote growth for BL21 cells.
- Celtone[®] Plus powder allows the researcher to control the amount of nutrients required for the growth of their particular protein. The medium becomes richer as the concentration is increased. The medium becomes fully "rich" at ~10 g/L, however, gains in yield become apparent at concentrations as low as 1 g/L.

Minimal Media Reagents

Catalog No.	Description
CDLM-3813	Glucose (¹³ C ₆ , 99%; D ₇ , 97-98%)
DLM-2062	Glucose (D ₇ , 97-98%)
NLM-467	Ammonium chloride (¹⁵ N, 99%)
NLM-713	Ammonium sulfate (¹⁵ N, 99%)
DLM-4	Deuterium oxide (D ₂ O)

Questions?

Contact Dr. Kevin Millis, senior scientist, at kevinm@isotope.com.

Catalog No. **CGM-1050P-D**

Used to produce uniformly deuterated protein. To be used with deuterated minimal media in D₂O at a concentration of 1-10 g/L.

Catalog No. **CGM-1050P-DN**

Used to produce uniformly deuterated and ¹⁵N-enriched protein. To be used with minimal media containing D₇ glucose and ¹⁵N ammonium chloride in D₂O.

Catalog No. **CGM-1050P-CDN**

Used to produce uniformly triple-labeled enriched protein. To be used with minimal media containing ¹³C₆D₇ glucose and ¹⁵N ammonium chloride in D₂O.

Also available:

¹³C-Enriched Celtone[®] Plus Powder!

Catalog No. **CGM-1050P-C**

Used to produce uniformly ¹³C-enriched protein. To be used with minimal media containing ¹³C₆ glucose.

