NZM Medium, Liquid

Catalog Number **MM 011-01**
Storage Temperature 2~8°C

Product Description
NZM medium is widely used to support the growth of bacteiophage lamda, which infects its cell host, *E. coli* to replicate. The NZCYM, NZYM, and NZM mediums contain NZ-Amine A, which provides a source of high quality amino acids and peptides produced by the enzymatic digestion of casein. By providing the *E. coli* with such a rich assortment of components, the broths allow the bacteria to grow more rapidly because they do not need to synthesize nucleotide precursors and other factors needed for growth.

Storage/Stability
NZM medium should be stored at 2~8°C. Deterioration of NZM medium may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. The nature of supplements added may affect storage conditions and shelf life of NZM medium. Product label bears expiration date.

Biological Performance Characteristics
The NZCYM, NZYM, and NZM mediums contain yeast extract and casamino acids (which provide nutrients such as free amino acids required for growth of recombinant strains of *E. coli*). Growth components such as magnesium sulfate and sodium chloride are also present. Magnesium sulfate provides a source of magnesium ions for use in the enzymatic reaction of DNA replication. Sodium chloride provides the cells a suitable osmotic environment. By providing the *E. coli* with such a rich assortment of components, the broths allow the bacteria to grow more rapidly because they do not need to synthesize nucleotide precursors and other factors needed for growth. Inoculate and incubate cultures on a rotary shaker at 33°C to 37°C for 18~48 hours.

Precautions
For *In Vitro* Use Only

g/L

Components	MM 011-01
NZ amine	10.0
NaCl	5.0
$MgSO_4 \cdot 7H_2O$	2.0

Product Profile	
Appearance	Yellow transparent solution
pH at RT	6.8 ~ 7.2
Sterility	Sterilized by Autoclave system(121°C, 15 lb/sq. in., 20 min, Sterility tests are performed in accordance with protocols described in SOP.

References
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Ausubel, F. M., R. Brent, R. E. Kingston, D. D. Moore, J. G. Seidman, J. A. Smith, and K. Struhl (ed.). 1994. Current Protocols in Molecular Biology. Vol. 1. Current Protocols. New York, N. Y.

www.welgene.com | Seoul Office | TEL. 82-2-2057-3288 | Headquarter & Factory | TEL 82-53-811-7081 | FAX 82-53-811-7096