# Soc medium preparation:

Used in bacterial transformation.

# Ingredients for SOB:

- 0.5% (w/v) yeast extract
- 2% (w/v) tryptone
- 10 mM NaCl
- 2.5 mM KCl
- 20 mM MgSO<sub>4</sub>

# Per liter:

- 5 g yeast extract
- 20 g tryptone
- 0.584 g NaCl
- 0.186 g KCl
- 2.4 g MgSO<sub>4</sub>

Note: Some formulations of SOB use 10 mM  $MgCl_2$  and 10 mM  $MgSO_4$  instead of 20 mM  $MgSO_4$ .

SOB medium is also available dry premixed from Difco, 0443-17.

Adjust to pH 7.5 prior to use. This requires approximately 25 ml of 1M NaOH per liter.

#### 15/10 medium:

Growth of competent TOP10 cells in Example 2 of the Bloom05 patent is performed in 15/10 broth, which is similar to SOB:

- 1.5% yeast extract
- 1% Bacto-Tryptone
- 10mM NaCl
- 2mM KCl
- 10 mM MgCl<sub>2</sub>
- 10 mM MgSO<sub>4</sub>

# Make SOB in to SOC:

For 1 L of SOB - After cooling medium to less than 50°C, add 20 ml filter sterilized 20% glucose solution