General Information

Gene: colony stimulating factor 2 (granulocyte-macrophage)

Official Symbol: CSF2

Synonym: CSF2, GMCSF

Source: Human

cDNA Size: 435

Description

Lot: Please refer to the label on the tube

Sequence Description:

A number of silent mutations were introduced into the DNA sequence in order to increase its protein expression level in E. coli system. The translated amino acid sequence is identical with NP_000749.2.

Vector: pGEM-T

Shipping carrier:

Each tube contains approximately 10 µg of lyophilized plasmid.

Storage:

The lyophilized plasmid can be stored at ambient temperature for three months.

Quality control:

The plasmid is confirmed by full-length sequencing with primers in the sequencing primer list.

Sequencing primer list:

<table>
<thead>
<tr>
<th>プライマー</th>
<th>ハンディーカード</th>
</tr>
</thead>
<tbody>
<tr>
<td>M13-47</td>
<td>5’ GCCAGGGTTTCCAGTCACGAC 3’</td>
</tr>
<tr>
<td>RV-M</td>
<td>5’ GAGCGGATAACAATTTCCACACAGG 3’</td>
</tr>
</tbody>
</table>

Other M13 primers can also be used as sequencing primers.

Plasmid Resuspension protocol

1. Centrifuge at 5,000 × g for 5 min.
2. Carefully open the tube and add 100 µl of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000 × g.
5. Store the plasmid at -20 °C.

The plasmid is ready for:

- Restriction enzyme digestion
- PCR amplification
- E. coli transformation
- DNA sequencing

E. coli strains for transformation (recommended but not limited)

Most commercially available competent cells are appropriate for the plasmid, e.g. TOP10, DH5α and TOP10F⁻.
Vector Information

The pGEM-T vector is a high-efficiency TA cloning vector which contains multiple cloning sites as shown below. The pGEM-T vector is 3.0kb in size and contains the ampicillin resistance gene for selection. The coding sequence was inserted by TA cloning.

Physical Map of pGEM-T: