Gene Information

**Gene:** insulin like growth factor 1

**Official Symbol:** IGF1

**Synonym:** IGF-1; IGF1-A; IGF1; IGF1-I; MGF

**Source:** Human

**cDNA Size:** 522bp (cDNA Size= Gene + linker +Tags)

**RefSeq:** NM_001111283.2

**Plasmid:** pCMV3-IGF1-His

Description

**Lot:** Please refer to the label on the tube

**Sequence Description:**
Identical with the Gene Bank Ref. ID sequence.

**Restriction site:** KpnI + XbaI (6kb+0.52kb)

**Vector:** pCMV3-C-His

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

**Sequencing primer list:**

<table>
<thead>
<tr>
<th>Primer</th>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>pCMV3-F</td>
<td>5' CAGGTGTCCACTCCACGGTCAAG 3'</td>
</tr>
<tr>
<td>pcDNA3-R</td>
<td>5’ GGCAACTAGAAGGCACAGTCGAGG 3'</td>
</tr>
</tbody>
</table>

Or

<table>
<thead>
<tr>
<th>Primer</th>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward T7</td>
<td>5' TAATACGACTCTATAGGG 3'</td>
</tr>
<tr>
<td>Reverse BGH</td>
<td>5' TAGAAGGACACAGTCGAGG 3'</td>
</tr>
</tbody>
</table>

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

All of the pCMV vectors are designed for high-level stable and transient expression in mammalian hosts. High-level stable and non-replicative transient expression can be carried out in most mammalian cells. The vectors contain the following elements:

- Human enhanced cytomegalovirus immediate-early (CMV) promoter for high-level expression in a wide range of mammalian cells.
- Hygromycin resistance gene for selection of mammalian cell lines.
- A Kozak consensus sequence to enhance mammalian expression.

Physical Map of Plasmid: