Product datasheet for **RC206860L2**

**HPD (NM_002150) Human Tagged ORF Clone**

**Product data:**

- **Product Type:** Expression Plasmids
- **Product Name:** HPD (NM_002150) Human Tagged ORF Clone
- **Tag:** mGFP
- **Symbol:** HPD
- **Synonyms:** 4-HPPD; 4HPPD; GLOD3; HPPDASE; PPD
- **Vector:** pLenti-C-mGFP (PS100071)
- **E. coli Selection:** Chloramphenicol (34 ug/mL)
- **Cell Selection:** None
- **ORF Nucleotide Sequence:** The ORF insert of this clone is exactly the same as(RC206860).
- **Restriction Sites:** SgfI-MluI
- **Cloning Scheme:**

```
<table>
<thead>
<tr>
<th>SgfI</th>
<th>ORF</th>
<th>MluI</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>ATG</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>NNN</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>ACC</td>
<td>CAG</td>
</tr>
</tbody>
</table>
```

**Cloning sites used for ORF Shuttling:**

```
EcoRI  BamHI  RBS  Kozak   MluI
CTAGGGCCGCGCGGATCTTCTGACTGGATCCGGTAGACAGGACCGCTGCCGCTGCCGCTGCCGATGCC
```

```
MluI  NotI  XhoI  mGFP Tag
|     |     |     |      |
| ... | NNN | ... | ... |
| ... | ACC | CAG |

```

**ACCN:** NM_002150

**ORF Size:** 1179 bp

* The last codon before the Stop codon of the ORF.
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

RefSeq: NM_002150.2, NP_002141.1
RefSeq Size: 1440 bp
RefSeq ORF: 1182 bp
Locus ID: 3242
Cytogenetics: 12q24.31
Domains: Glyoxalase
Protein Families: Druggable Genome
Protein Pathways: Metabolic pathways, Phenylalanine metabolism, Tyrosine metabolism, Ubiquinone and other terpenoid-quinone biosynthesis
MW: 44.9 kDa
Gene Summary: The protein encoded by this gene is an enzyme in the catabolic pathway of tyrosine. The encoded protein catalyzes the conversion of 4-hydroxyphenylpyruvate to homogentisate. Defects in this gene are a cause of tyrosinemia type 3 (TYRO3) and hawkinsinuria (HAWK). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]