

#### OriGene Technologies, Inc.

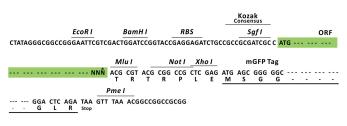
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# Product datasheet for RC209103L2

### Kir6.2 (KCNJ11) (NM\_000525) Human Tagged Lenti ORF Clone

## **Product data:**

| Product Type:                | Expression Plasmids  |
|------------------------------|--|
| Product Name:                | Kir6.2 (KCNJ11) (NM_000525) Human Tagged Lenti ORF Clone       |
| Tag:                         | mGFP   |
| Symbol:                      | Kir6.2   |
| Synonyms:                    | BIR; HHF2; IKATP; KIR6.2; MODY13; PHHI; PNDM2; TNDM3           |
| Mammalian Cell<br>Selection: | None   |
| Vector:                      | pLenti-C-mGFP (PS100071)                                       |
| E. coli Selection:           | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide<br>Sequence:  | The ORF insert of this clone is exactly the same as(RC209103). |
| <b>Restriction Sites:</b>    | Sgfl-Mlul  |
| Cloning Scheme:              |  |
|                              | Cloning sites used for ORF Shuttling:                          |
|                              | Sgf I ORF Mlu I    GCG ATC GCC ATG // NNŇ ACG CGT              |

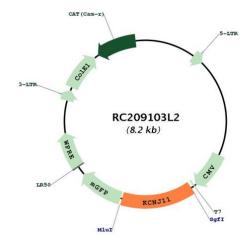


\* The last codon before the Stop codon of the ORF.



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#### Plasmid Map:



| ACCN: NI                   | IM_000525   |
|----------------------------|---|
| ORF Size: 11               | 170 bp  |
| re<br>na<br>clo            | he molecular sequence of this clone aligns with the gene accession number as a point of<br>eference only. However, individual transcript sequences of the same gene can differ through<br>aturally occurring variations (e.g. polymorphisms), each with its own valid existence. This<br>one is substantially in agreement with the reference, but a complete review of all prevailing<br>ariants is recommended prior to use. <u>More info</u> |
|                            | his clone was engineered to express the complete ORF with an expression tag. Expression<br>aries depending on the nature of the gene.   |
| •                          | he ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube<br>ontaining 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).   |
| 2.<br>3.<br>4.<br>at<br>5. | . Centrifuge at 5,000xg for 5min.<br>. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>. Close the tube and incubate for 10 minutes at room temperature.<br>. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid<br>t the bottom.<br>. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of<br>hipping when stored at -20°C.    |
| RefSeq: <u>NM</u>          | <u>M 000525.3</u>   |
| RefSeq Size: 34            | 418 bp  |
| RefSeq ORF: 11             | 173 bp  |

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| CRIGENE Kir6.2 (KCNJ11) (NM_000525) Human Tagged Lenti ORF Clone – RC209103L2 |  |  |
|---|--|--|
| Locus ID:   | 3767   |  |
| Cytogenetics:   | 11p15.1  |  |
| Protein Families:   | Druggable Genome, Ion Channels: Potassium, Transmembrane   |  |
| Protein Pathways:   | Type II diabetes mellitus  |  |
| MW:   | 43.5 kDa   |  |
| Gene Summary:   | Potassium channels are present in most mammalian cells, where they participate in a wide<br>range of physiologic responses. The protein encoded by this gene is an integral membrane<br>protein and inward-rectifier type potassium channel. The encoded protein, which has a<br>greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled<br>by G-proteins and is found associated with the sulfonylurea receptor SUR. Mutations in this<br>gene are a cause of familial persistent hyperinsulinemic hypoglycemia of infancy (PHHI), an<br>autosomal recessive disorder characterized by unregulated insulin secretion. Defects in this<br>gene may also contribute to autosomal dominant non-insulin-dependent diabetes mellitus<br>type II (NIDDM), transient neonatal diabetes mellitus type 3 (TNDM3), and permanent<br>neonatal diabetes mellitus (PNDM). Multiple alternatively spliced transcript variants that<br>encode different protein isoforms have been described for this gene. [provided by RefSeq,<br>Oct 2009] |  |

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