

## Product datasheet for RR210052L4

## Oas2 (NM\_001009715) Rat Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Oas2 (NM\_001009715) Rat Tagged Lenti ORF Clone

Tag: mGFP Symbol: Oas2

Mammalian Cell Puromycin

Selection: Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF ins

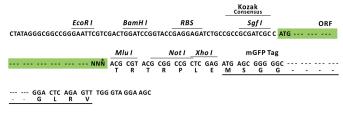
Sequence:

The ORF insert of this clone is exactly the same as(RR210052).

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_001009715

ORF Size: 2199 bp

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## Oas2 (NM\_001009715) Rat Tagged Lenti ORF Clone - RR210052L4

**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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul 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 (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001009715.1</u>, <u>NP 001009715.1</u>

12q16

 RefSeq Size:
 2274 bp

 RefSeq ORF:
 2202 bp

 Locus ID:
 363938

 UniProt ID:
 Q5MYU0

Cytogenetics:

**Gene Summary:** Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular

innate antiviral response. Activated by detection of double stranded RNA (dsRNA):

polymerizes higher oligomers of 2'-5'-oligoadenylates (2-5A) from ATP which then bind to the

inactive monomeric form of ribonuclease L (RNASEL) leading to its dimerization and  $\,$ 

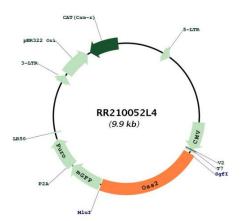
subsequent activation. Activation of RNASEL leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication. Can mediate the antiviral effect via the classical RNASEL-dependent pathway or an alternative antiviral pathway independent of RNASEL. In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation (By similarity). May act as a negative regulator of lactation, stopping lactation in virally infected mammary gland lobules, thereby preventing transmission of viruses to neonates (By similarity). Non-

infected lobules would not be affected, allowing efficient pup feeding during infection (By

similarity).[UniProtKB/Swiss-Prot Function]



## **Product images:**



Circular map for RR210052L4