

## Product datasheet for RR204647L4

### Tifa (NM\_001014044) Rat Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tifa (NM_001014044) Rat Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Tifa
Synonyms:	Ab2-389; T2bp
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR204647).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

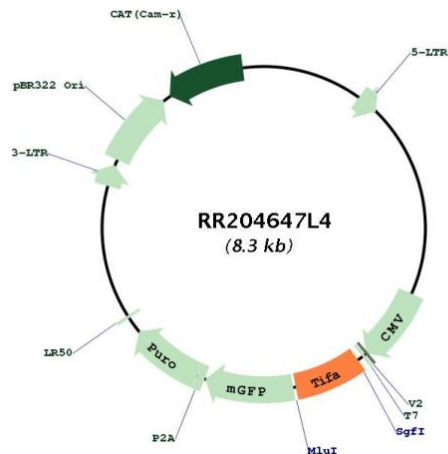
Cloning sites used for ORF Shuttling:



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



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**Plasmid Map:**


**ACCN:** NM\_001014044

**ORF Size:** 555 bp

**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:** [NM\\_001014044.1](#), [NP\\_001014066.1](#)

**RefSeq Size:** 1662 bp

**RefSeq ORF:** 558 bp

Locus ID: 310877

UniProt ID: [Q5XIB9](#)

Cytogenetics: 2q42

**Gene Summary:** Adapter molecule that plays a key role in the activation of proinflammatory NF-kappa-B signaling following detection of bacterial pathogen-associated molecular pattern metabolites (PAMPs). Promotes activation of an innate immune response by inducing the oligomerization and polyubiquitination of TRAF6, which leads to the activation of TAK1 and IKK through a proteasome-independent mechanism. TIFA-dependent innate immune response is triggered by ADP-D-glycero-beta-D-manno-heptose (ADP-Heptose), a potent PAMP present in all Gram-negative and some Gram-positive bacteria: ADP-Heptose is recognized by ALPK1, which phosphorylates TIFA at Thr-9, leading to TIFA homooligomerization and subsequent activation of proinflammatory NF-kappa-B signaling.[UniProtKB/Swiss-Prot Function]