

Product datasheet for **RR215211L3V**

Emp2 (NM_001007721) Rat Tagged ORF Clone Lentiviral Particle

Product data:

| | |
|---------------------------|--|
| Product Type: | Lentiviral Particles |
| Product Name: | Emp2 (NM_001007721) Rat Tagged ORF Clone Lentiviral Particle |
| Symbol: | Emp2 |
| Synonyms: | EMP-2 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-Myc-DDK-P2A-Puro (PS100092) |
| Tag: | Myc-DDK |
| ACCN: | NM_001007721 |
| ORF Size: | 516 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RR215211). |
| 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_001007721.1 , NP_001007722.1 |
| RefSeq Size: | 3154 bp |
| RefSeq ORF: | 519 bp |
| Locus ID: | 360468 |
| UniProt ID: | Q66HH2 |
| Cytogenetics: | 10q11 |



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Gene Summary:

Functions as a key regulator of cell membrane composition by regulating proteins surface expression. Also, plays a role in regulation of processes including cell migration, cell proliferation, cell contraction and cell adhesion. Negatively regulates caveolae formation by reducing CAV1 expression and CAV1 amount by increasing lysosomal degradation. Facilitates surface trafficking and the formation of lipid rafts bearing GPI-anchor proteins. Regulates surface expression of MHC1 and ICAM1 proteins increasing susceptibility to T-cell mediated cytotoxicity. Regulates the plasma membrane expression of the integrin heterodimers ITGA6-ITGB1, ITGA5-ITGB3 and ITGA5-ITGB1 resulting in modulation of cell-matrix adhesion. Also regulates many processes through PTK2. Regulates blood vessel endothelial cell migration and angiogenesis by regulating VEGF protein expression through PTK2 activation. Regulates cell migration and cell contraction through PTK2 and SRC activation. Regulates focal adhesion density, F-actin conformation and cell adhesion capacity through interaction with PTK2. Positively regulates cell proliferation. Plays a role during cell death and cell blebbing. Promotes angiogenesis and vasculogenesis through induction of VEGFA via a HIF1A-dependent pathway. Also plays a role in embryo implantation by regulating surface trafficking of integrin heterodimer ITGA5-ITGB3. May play a role in glomerular filtration.
[UniProtKB/Swiss-Prot Function]