

## Product datasheet for **TL509941V**

### **Egfr Mouse shRNA Lentiviral Particle (Locus ID 13649)**

#### **Product data:**

<b>Product Type:</b>	shRNA Lentiviral Particles
<b>Product Name:</b>	Egfr Mouse shRNA Lentiviral Particle (Locus ID 13649)
<b>Locus ID:</b>	13649
<b>Synonyms:</b>	9030024J15Rik; AI552599; Erbb; Errb1; Errp; wa-2; wa2; Wa5
<b>Vector:</b>	pGFP-C-shLenti (TR30023)
<b>Format:</b>	Lentiviral particles
<b>Components:</b>	Egfr - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10 <sup>7</sup> TU/ml.
<b>RefSeq:</b>	<a href="#">BC023729</a> , <a href="#">NM_007912</a> , <a href="#">NM_207655</a> , <a href="#">NM_007912.1</a> , <a href="#">NM_007912.2</a> , <a href="#">NM_007912.3</a> , <a href="#">NM_007912.4</a> , <a href="#">NM_207655.1</a> , <a href="#">NM_207655.2</a> , <a href="#">BC030681</a>
<b>UniProt ID:</b>	<a href="#">Q01279</a>
<b>Summary:</b>	Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed:8404850). Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (By similarity). Plays a role in enhancing learning and memory performance (PubMed:20639532).[UniProtKB/Swiss-Prot Function]
<b>shRNA Design:</b>	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).