

# Product datasheet for TL311415

## TPOR (MPL) Human shRNA Plasmid Kit (Locus ID 4352)

### **Product data:**

#### **Product Type:** shRNA Plasmids **Product Name:** TPOR (MPL) Human shRNA Plasmid Kit (Locus ID 4352) Locus ID: 4352 C-MPL; CD110; MPLV; THCYT2; THPOR; TPOR Synonyms: Vector: pGFP-C-shLenti (TR30023) E. coli Selection: Chloramphenicol (34 ug/ml) Mammalian Cell Puromycin Selection: Format: Lentiviral plasmids MPL - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4352). 5µg **Components:** purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. NM 005373, NM 005373.1, NM 005373.2, BC140298, BC153092, NM 005373.3 RefSeq: **UniProt ID:** P40238 In 1990 an oncogene, v-mpl, was identified from the murine myeloproliferative leukemia Summary: virus that was capable of immortalizing bone marrow hematopoietic cells from different lineages. In 1992 the human homologue, named, c-mpl, was cloned. Sequence data revealed that c-mpl encoded a protein that was homologous with members of the hematopoietic receptor superfamily. Presence of anti-sense oligodeoxynucleotides of c-mpl inhibited megakaryocyte colony formation. The ligand for c-mpl, thrombopoietin, was cloned in 1994. Thrombopoietin was shown to be the major regulator of megakaryocytopoiesis and platelet formation. The protein encoded by the c-mpl gene, CD110, is a 635 amino acid transmembrane domain, with two extracellular cytokine receptor domains and two intracellular cytokine receptor box motifs . TPO-R deficient mice were severely thrombocytopenic, emphasizing the important role of CD110 and thrombopoietin in megakaryocyte and platelet formation. Upon binding of thrombopoietin CD110 is dimerized and the JAK family of non-receptor tyrosine kinases, as well as the STAT family, the MAPK

family, the adaptor protein Shc and the receptors themselves become tyrosine



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phosphorylated. [provided by RefSeq, Jul 2008]

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	TPOR (MPL) Human shRNA Plasmid Kit (Locus ID 4352) – TL311415
shRNA Design:	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 <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .
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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

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