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Product datasheet for TL502252

Tec Mouse shRNA Plasmid (Locus ID 21682)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Tec Mouse shRNA Plasmid (Locus ID 21682)
Locus ID:	21682
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Tec - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 21682). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	BC037071, BC062884, NM_001113460, NM_001113461, NM_001113464, NM_013689, NM_001113461.1, NM_001113461.2, NM_001113460.1, NM_001113460.2, NM_001113464.1, NM_001113464.2, NM_013689.1, NM_013689.2, NM_013689.3, NM_013689.4, NM_013689.5, BC018230
UniProt ID:	P24604

Summary:

Non-receptor tyrosine kinase that contributes to signaling from many receptors and participates as a signal transducer in multiple downstream pathways, including regulation of the actin cytoskeleton. Plays a redundant role to ITK in regulation of the adaptive immune response. Regulates the development, function and differentiation of conventional T-cells and nonconventional NKT-cells. Required for TCR-dependent IL2 gene induction. Phosphorylates DOK1, one CD28-specific substrate, and contributes to CD28-signaling. Mediates signals that negatively regulate IL2RA expression induced by TCR cross-linking. Plays a redundant role to BTK in BCR-signaling for B-cell development and activation, especially by phosphorylating STAP1, a BCR-signaling protein. Required in mast cells for efficient cytokine production. Involved in both growth and differentiation mechanisms of myeloid cells through activation by the granulocyte colony-stimulating factor CSF3, a critical cytokine to promoting the growth, differentiation, and functional activation of myeloid cells. Participates in platelet signaling downstream of integrin activation. Cooperates with JAK2 through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. GRB10, a negative modifier of the FOS activation pathway, is another substrate of TEC. TEC is involved in G protein-coupled receptor- and integrin-mediated signalings in blood platelets. Plays a role in hepatocyte proliferation and liver regeneration and is involved in HGF-induced ERK signaling pathway. TEC regulates also FGF2 unconventional secretion (endoplasmic reticulum (ER)/Golgi-independent mechanism) under various physiological conditions through phosphorylation of FGF2 'Tyr-82'. May also be involved in the regulation of osteoclast differentiation.[UniProtKB/Swiss-Prot Function]

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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).