

Product datasheet for **TG516729**

Picalm Mouse shRNA Plasmid (Locus ID 233489)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Picalm Mouse shRNA Plasmid (Locus ID 233489)
Locus ID:	233489
Synonyms:	CALM; CLTH; fit-1; fit1; mKIAA4114; PAP180
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Picalm - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 233489). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	BC011470 , BC021491 , BC023843 , BC025566 , BC057683 , NM_001252520 , NM_001252521 , NM_001252522 , NM_001252523 , NM_001252524 , NM_146194 , NM_001360867 , NM_146194.1 , NM_146194.2 , NM_146194.3 , NM_146194.4 , NM_001252524.1 , NM_001252523.1 , NM_001252522.1 , NM_001252521.1 , NM_001252520.1 , BC011470.1 , BC025566.1 , BC027116 , NM_001252520.2 , NM_001252521.2 , NM_001252523.2 , NM_001252522.2 , NM_001252524.2 , NM_146194.5
UniProt ID:	Q7M6Y3



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Summary:	<p>Cytoplasmic adapter protein that plays a critical role in clathrin-mediated endocytosis which is important in processes such as internalization of cell receptors, synaptic transmission or removal of apoptotic cells. Recruits AP-2 and attaches clathrin triskelions to the cytoplasmic side of plasma membrane leading to clathrin-coated vesicles (CCVs) assembly. Furthermore, regulates clathrin-coated vesicle size and maturation by directly sensing and driving membrane curvature. In addition to binding to clathrin, mediates the endocytosis of small R-SNARES (Soluble NSF Attachment Protein REceptors) between plasma membranes and endosomes including VAMP2, VAMP3, VAMP4, VAMP7 or VAMP8. In turn, PICALM-dependent SNARE endocytosis is required for the formation and maturation of autophagic precursors. Modulates thereby autophagy and the turnover of autophagy substrates such as MAPT/TAU or amyloid precursor protein cleaved C-terminal fragment (APP-CTF).[UniProtKB/Swiss-Prot Function]</p>
shRNA Design:	<p>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.</p>
Performance Guaranteed:	<p>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.</p> <p>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).</p>