

## **Product datasheet for TR515201**

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## Fam20c Mouse shRNA Plasmid (Locus ID 80752)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Fam20c Mouse shRNA Plasmid (Locus ID 80752)

**Locus ID:** 80752

Synonyms: C76981; DMP-4; DMP4; GEF-CK; mKIAA4081

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Fam20c - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

80752). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** BC004044, BC025814, BC025826, NM 030565, NM 001359593, NM 030565.1, NM 030565.2,

NM 030565.3, NM 030565.4, NM 030565.5, NM 030565.6

UniProt ID: Q5MJS3

**Summary:** Golgi serine/threonine protein kinase that phosphorylates secretory pathway proteins within

Ser-x-Glu/pSer motifs and plays a key role in biomineralization of bones and teeth

(PubMed:22900076, PubMed:22732358, PubMed:25789606). Constitutes the main protein

kinase for extracellular proteins, generating the majority of the extracellular

phosphoproteome (By similarity). Mainly phosphorylates proteins within the Ser-x-Glu/pSer motif, but also displays a broader substrate specificity (By similarity). Phosphorylates casein as well as a number of proteins involved in biomineralization such as AMELX, AMTN, ENAM and SPP1 (PubMed:25789606). In addition to its role in biomineralization, also plays a role in

lipid homeostasis, wound healing and cell migration and adhesion (By similarity).

[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 <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).