

Product datasheet for **TR509563**

NoI3 Mouse shRNA Plasmid (Locus ID 78688)

Product data:

Product Type:	shRNA Plasmids
Product Name:	NoI3 Mouse shRNA Plasmid (Locus ID 78688)
Locus ID:	78688
Synonyms:	ARC; B430311C09Rik; MYC; NOP; Nop30
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	NoI3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 78688). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC027290 , NM_030152 , NM_030152.1 , NM_030152.2 , NM_030152.3 , NM_030152.4 , BC053971
UniProt ID:	Q9D1X0



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Summary: Apoptosis repressor that blocks multiple modes of cell death. Inhibits extrinsic apoptotic pathways through two different ways. Firstly by interacting with FAS and FADD upon FAS activation blocking death-inducing signaling complex (DISC) assembly (By similarity). Secondly by interacting with CASP8 in a mitochondria localization- and phosphorylation-dependent manner, limiting the amount of soluble CASP8 available for DISC-mediated activation (By similarity). Inhibits intrinsic apoptotic pathway in response to a wide range of stresses, through its interaction with BAX resulting in BAX inactivation, preventing mitochondrial dysfunction and release of pro-apoptotic factors (PubMed:16505176) (PubMed:24312627). Inhibits calcium-mediated cell death by functioning as a cytosolic calcium buffer, dissociating its interaction with CASP8 and maintaining calcium homeostasis (By similarity). Negatively regulates oxidative stress-induced apoptosis by phosphorylation-dependent suppression of the mitochondria-mediated intrinsic pathway, by blocking CASP2 activation and BAX translocation (By similarity). Negatively regulates hypoxia-induced apoptosis in part by inhibiting the release of cytochrome c from mitochondria in a caspase-independent manner (By similarity). Also inhibits TNF-induced necrosis by preventing TNF-signaling pathway through TNFRSF1A interaction abrogating the recruitment of RIPK1 to complex I (PubMed:24440909). Finally through its role as apoptosis repressor, promotes vascular remodeling through inhibition of apoptosis and stimulation of proliferation, in response to hypoxia (PubMed:22082675). Inhibits too myoblast differentiation through caspase inhibition (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 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).