

## OriGene Technologies, Inc.

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## Product datasheet for TG305640

## Caspase 1 (CASP1) Human shRNA Plasmid Kit (Locus ID 834)

## **Product data:**

Product Type:	shRNA Plasmids
Product Name:	Caspase 1 (CASP1) Human shRNA Plasmid Kit (Locus ID 834)
Locus ID:	834
Synonyms:	ICE; IL1BC; P45
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CASP1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 834). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<u>NM 001223, NM 001257118, NM 001257119, NM 033292, NM 033293, NM 033294,</u> <u>NM 033295, NM 033293.1, NM 033293.2, NM 033293.3, NM 033292.1, NM 033292.2,</u> <u>NM 033292.3, NM 033294.1, NM 033294.2, NM 033294.3, NM 001223.1, NM 001223.2,</u> <u>NM 001223.3, NM 001223.4, NM 033295.1, NM 033295.2, NM 033295.3, NM 001257119.1,</u> <u>NM 001257119.2, NM 001257118.1, NM 001257118.2, BC062327, BC062327.1, BC041689,</u> <u>NM 001257118.3, NM 001257119.3, NM 033292.4, NM 001223.5, NM 033293.4</u>
UniProt ID:	<u>P29466</u>
Summary:	This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Mar 2012]



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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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