

## Product datasheet for **RC219490L2V**

### TAOK1 (NM\_020791) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	TAOK1 (NM_020791) Human Tagged ORF Clone Lentiviral Particle
Symbol:	TAOK1
Synonyms:	hKFC-B; hTAOK1; KFC-B; MAP3K16; MARKK; PSK-2; PSK2; TAO1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_020791
ORF Size:	3003 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC219490).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_020791.2</a>
RefSeq Size:	12096 bp
RefSeq ORF:	3006 bp
Locus ID:	57551
UniProt ID:	<a href="#">Q7L7X3</a>
Cytogenetics:	17q11.2
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	MAPK signaling pathway



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MW: 116.1 kDa

**Gene Summary:** Serine/threonine-protein kinase involved in various processes such as p38/MAPK14 stress-activated MAPK cascade, DNA damage response and regulation of cytoskeleton stability. Phosphorylates MAP2K3, MAP2K6 and MARK2. Acts as an activator of the p38/MAPK14 stress-activated MAPK cascade by mediating phosphorylation and subsequent activation of the upstream MAP2K3 and MAP2K6 kinases. Involved in G-protein coupled receptor signaling to p38/MAPK14. In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stress-activated MAPK cascade, probably by mediating phosphorylation of MAP2K3 and MAP2K6. Acts as a regulator of cytoskeleton stability by phosphorylating 'Thr-208' of MARK2, leading to activate MARK2 kinase activity and subsequent phosphorylation and detachment of MAPT/TAU from microtubules. Also acts as a regulator of apoptosis: regulates apoptotic morphological changes, including cell contraction, membrane blebbing and apoptotic bodies formation via activation of the MAPK8/JNK cascade.[UniProtKB/Swiss-Prot Function]