

## Product datasheet for **RC210866L3V**

### SMURF 2 (SMURF2) (NM\_022739) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	SMURF 2 (SMURF2) (NM_022739) Human Tagged ORF Clone Lentiviral Particle
Symbol:	SMURF2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_022739
ORF Size:	2244 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210866).
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_022739.3</a>
RefSeq Size:	3866 bp
RefSeq ORF:	2247 bp
Locus ID:	64750
UniProt ID:	<a href="#">Q9HAU4</a>
Cytogenetics:	17q23.3-q24.1
Domains:	C2, HECT, WW
Protein Families:	Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors



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<b>Protein Pathways:</b>	Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, TGF-beta signaling pathway, Type I diabetes mellitus, Ubiquitin mediated proteolysis, Viral myocarditis
<b>MW:</b>	86.2 kDa
<b>Gene Summary:</b>	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-dependent degradation. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.[UniProtKB/Swiss-Prot Function]