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Product datasheet for RC226431

Tuberin (TSC2) (NM_001114382) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tuberin (TSC2) (NM_001114382) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tuberin
Synonyms:	LAM; PPP1R160; TSC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC226431 representing NM_001114382
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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Protein Sequence:

>RC226431 representing NM_001114382
Red=Cloning site Green=Tags(s)

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LEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8117_b03.zip

Restriction Sites: SgfI-XhoI

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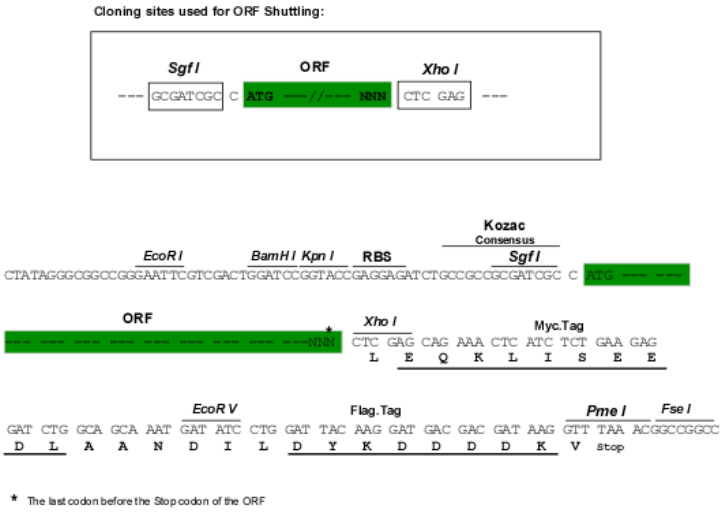
Cloning Scheme:



ACCN:	NM_001114382
ORF Size:	5352 bp
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. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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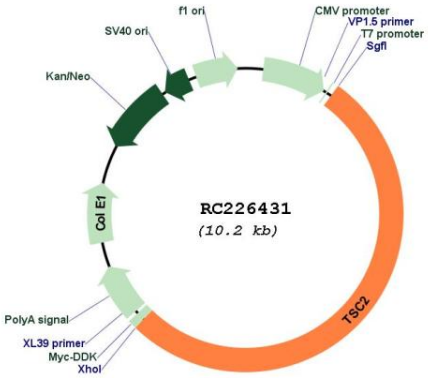
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001114382.2, NP_001107854.1
RefSeq ORF:	5355 bp
Locus ID:	7249
UniProt ID:	P49815
Cytogenetics:	16p13.3
Protein Families:	Druggable Genome
Protein Pathways:	Insulin signaling pathway, mTOR signaling pathway, p53 signaling pathway
MW:	197.9 kDa
Gene Summary:	Mutations in this gene lead to tuberous sclerosis complex. Its gene product is believed to be a tumor suppressor and is able to stimulate specific GTPases. The protein associates with hamartin in a cytosolic complex, possibly acting as a chaperone for hamartin. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226431

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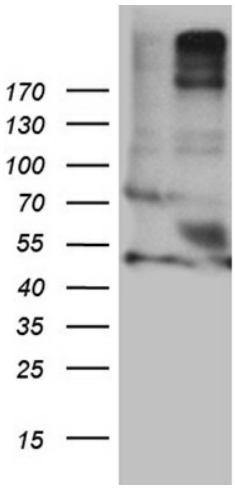
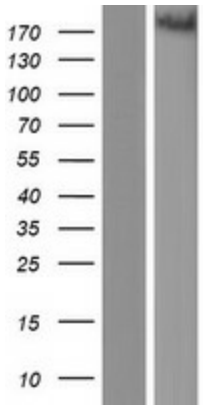


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TSC2 (Cat# RC226431, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TSC2 rabbit polyclonal antibody (Cat# [TA890153]).



Western blot validation of overexpression lysate (Cat# [LY426483]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226431 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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