

## Product datasheet for **SC315654**

### Tuberin (TSC2) (NM\_001077183) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tuberin (TSC2) (NM_001077183) Human Untagged Clone
Tag:	Tag Free
Symbol:	TSC2
Synonyms:	LAM; PPP1R160; TSC4
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001077183, the custom clone sequence may differ by one or more nucleotides

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<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_001077183
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001077183.1</a></u> , <u><a href="#">NP_001070651.1</a></u>
<b>RefSeq Size:</b>	5474 bp
<b>RefSeq ORF:</b>	5223 bp
<b>Locus ID:</b>	7249
<b>UniProt ID:</b>	<u><a href="#">P49815</a></u>
<b>Cytogenetics:</b>	16p13.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Insulin signaling pathway, mTOR signaling pathway, p53 signaling pathway
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (4) differs in multiple places compared to variant 1. The resulting isoform (4) has the same N- and C-termini but is shorter compared to isoform 1.</p>