

Product datasheet for SC318732

ITPR2 (NM_002223) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITPR2 (NM_002223) Human Untagged Clone
Tag:	Tag Free
Symbol:	ITPR2
Synonyms:	ANHD; CFAP48; INSP3R2; IP3R2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002223, the custom clone sequence may differ by one or more nucleotides

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 CAC

Restriction Sites:	Please inquire
ACCN:	NM_002223
OTI Disclaimer:	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).
OTI Annotation:	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.
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).
Reconstitution Method:	<ol style="list-style-type: none"> 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_002223.2 , NP_002214.2
RefSeq Size:	12568 bp
RefSeq ORF:	8106 bp
Locus ID:	3709
UniProt ID:	Q14571
Cytogenetics:	12p11.23
Domains:	RYDR_ITPR, MIR, ion_trans
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Alzheimer's disease, Calcium signaling pathway, Gap junction, GnRH signaling pathway, Long-term depression, Long-term potentiation, Oocyte meiosis, Phosphatidylinositol signaling system, Vascular smooth muscle contraction

Gene Summary:

The protein encoded by this gene belongs to the inositol 1,4,5-triphosphate receptor family, whose members are second messenger intracellular calcium release channels. These proteins mediate a rise in cytoplasmic calcium in response to receptor activated production of inositol triphosphate. Inositol triphosphate receptor-mediated signaling is involved in many processes including cell migration, cell division, smooth muscle contraction, and neuronal signaling. This protein is a type 2 receptor that consists of a cytoplasmic amino-terminus that binds inositol triphosphate, six membrane-spanning helices that contribute to the ion pore, and a short cytoplasmic carboxy-terminus. A mutation in this gene has been associated with anhidrosis, suggesting that intracellular calcium release mediated by this protein is required for eccrine sweat production. [provided by RefSeq, Apr 2015]