

## **Product datasheet for TR312064**

## ITPR2 Human shRNA Plasmid Kit (Locus ID 3709)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: ITPR2 Human shRNA Plasmid Kit (Locus ID 3709)

**Locus ID:** 3709

**Synonyms:** ANHD; CFAP48; INSP3R2; IP3R2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: ITPR2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

3709). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 002223, NM 002223.1, NM 002223.2, NM 002223.3, BC172383

UniProt ID: Q14571

**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 aminoterminus 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

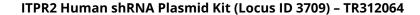
be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



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## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).