

# **Product datasheet for SC302910**

## PHYH (NM 001037537) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** PHYH (NM\_001037537) Human Untagged Clone

Tag: Tag Free
Symbol: PHYH

Synonyms: LN1; LNAP1; PAHX; PHYH1; RD

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC302910 representing NM\_001037537.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

GTGAAAGGAGAAAGAACCAATCTTTGA

**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



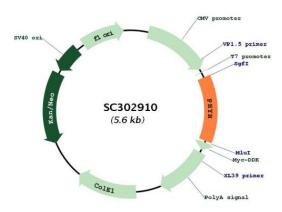
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#### Plasmid Map:



**ACCN:** NM\_001037537

**Insert Size:** 717 bp

**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:** 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:** <u>NM 001037537.1</u>



### PHYH (NM\_001037537) Human Untagged Clone - SC302910

 RefSeq Size:
 1725 bp

 RefSeq ORF:
 717 bp

 Locus ID:
 5264

 UniProt ID:
 014832

 Cytogenetics:
 10p13

**Protein Families:** Druggable Genome

MW: 27.3 kDa

**Gene Summary:** This gene is a member of the PhyH family and encodes a peroxisomal protein that is involved

in the alpha-oxidation of 3-methyl branched fatty acids. Specifically, this protein converts phytanoyl-CoA to 2-hydroxyphytanoyl-CoA. Mutations in this gene have been associated with Refsum disease (RD) and deficient protein activity has been associated with Zellweger syndrome and rhizomelic chondrodysplasia punctata. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2) differs in the 5' UTR and has multiple coding region

differences, compared to variant 1. These differences cause translation initiation at a downstream ATG and result in an isoform (b) with a shorter N-terminus compared to isoform

a. Variants 2 and 3 both encode the same isoform (b).