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Datasheet for ABIN3391283 Human OPN1LW cDNA Clone in Mammalian Expression Vector

Overview	
Quantity:	10 µg
Gene:	OPN1LW
Species:	Human
Insert:	cDNA
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)
Product Details	
Purpose:	Untagged full-length cDNA clone from Human OPN1LW is ideal for over-expression of native protein for functional studies.
Brand:	TrueClones®
Insert Length:	1100 bp
Vector Backbone:	pCMV6-XL5
Promoter:	Enhanced CMV Promoter, T7 Promoter
Bacterial Resistance:	Ampicillin
Expression Type:	Transient
Characteristics:	 These cDNA clones are isolated from full-length cDNA libraries and usually contain the coding sequence as well as the untranslated regions (UTRs) of the mRNA transcript appropriate to the library from which they were isolated. These cDNA clones are ideal for over-expression of native proteins for functional studies. Provided as 10 µg transfection-ready plasmids. Every lot of primer is tested to provide clean sequencing of cDNA clones.
Purification:	The DNAs were purified using PowerPrep HP Plasmid isolation kits for transfection ready plasmids.

Product Details	
Sequencing Primer:	VP1.5 (forward) 5'GGACTTTCCAAAATGTCG 3', XL39 (reverse) 5'ATTAGGACAAGGCTGGTGGG 3'
Components:	 The cDNA clone is shipped in a 2-D bar-coded Matrix tube as dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

Target Details

Gene:	OPN1LW
Alternative Name:	OPN1LW (OPN1LW Products)
Background:	This gene encodes for a light absorbing visual pigment of the opsin gene family. The encoded protein is called red cone photopigment or long-wavelength sensitive opsin. Opsins are G-protein coupled receptors with seven transmembrane domains, an N-terminal extracellular domain, and a C-terminal cytoplasmic domain. This gene and the medium-wavelength opsin gene are tandemly arrayed on the X chromosome and frequent unequal recombination and gene conversion may occur between these sequences. X chromosomes may have fusions of the medium- and long-wavelength opsin genes or may have more than one copy of these genes. Defects in this gene are the cause of partial, protanopic colorblindness. [provided by RefSeq, Jul 2008].
NCBI Accession:	NM_020061, NP_064445
Application Details	
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Storage:	RT,-20 °C
Storage Comment:	The lyophilized plasmid is stable for up to one year when stored at ambient temperature. Following dissolution in 100 μ L dH2O, store at -20 °C. Lyophilized primers are stable for up to one year when stored at ambient temperature. Following dissolution in 10 μ L dH2O, store at -2 °C.

Expiry Date:

12 months

Publications	
Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (
	1991)