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Datasheet for ABIN5415663

Human Abcd2 ORF Clone in Mammalian Expression Vector (Myc-DYKDDDDK Tag)

Overview	
Quantity:	10 μg
Gene:	Abcd2
Species:	Human
Fusion tag:	Myc-DYKDDDDK Tag
Insert:	ORF
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)
Product Details	
Purpose:	Mammalian Vector with ORF clone of Human ATP-binding cassette, sub-family D (ALD),
	member 2 (ABCD2)
Brand:	TrueORF
Insert Length:	2223 bp
Vector Backbone:	pCMV6-Entry
Promoter:	CMV Promoter
Bacterial Resistance:	Kanamycin
Expression Type:	Transient
Specificity:	Restriction Site: Sgfl-Mlul
Sequencing Primer:	VP1.5 (forward) 5'GGACTTTCCAAAATGTCG 3', XL39 (reverse) 5'ATTAGGACAAGGCTGGTGGG 3'
Grade:	End-sequenced
Components:	The ORF clone is ion-exchange column purified, transfection-ready dried plasmid DNA, and

shipped with 2 vector sequencing primers.

Target Details

Gene:	Abcd2
Abstract:	Abcd2 Products
Background:	The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ALD subfamily, which is involved in peroxisomal import of fatty acids and/or fatty acyl-CoAs in the organelle. All known peroxisomal ABC transporters are half transporters which require a partner half transporter molecule to form a functional homodimeric or heterodimeric transporter. The function of this peroxisomal membrane protein is unknown, however this protein is speculated to function as a dimerization partner of ABCD1 and/or other peroxisomal ABC transporters. Mutations in this gene have been observed in patients with adrenoleukodystrophy, a severe demyelinating disease. This gene has been identified as a candidate for a modifier gene, accounting for the extreme variation among adrenoleukodystrophy phenotypes. This gene is also a candidate for a complement group of Zellweger syndrome, a genetically heterogeneous disorder of peroxisomal biogenesis.
NCBI Accession:	NM_005164, NP_005155
Application Details	
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Storage:	4 °C/-20 °C
Publications	
Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (

1991)