

Product datasheet for RC215323

FYCO1 (NM_024513) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FYCO1 (NM_024513) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FYCO1
Synonyms:	CATC2; CTRCT18; RUFY3; ZFYVE7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215323 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCCACCAATGCAGAGAGCCAGCTCCAGAGAATCATCCGAGACTTGCAAGATGCTGTGACAGAAC
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Protein Sequence:

>RC215323 protein sequence
 Red=Cloning site Green=Tags(s)

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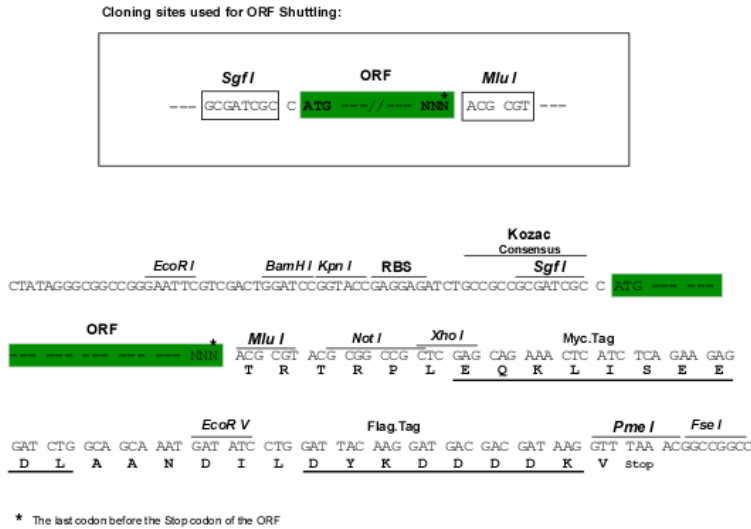
Chromatograms:

https://cdn.origene.com/chromatograms/mk6607_c09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

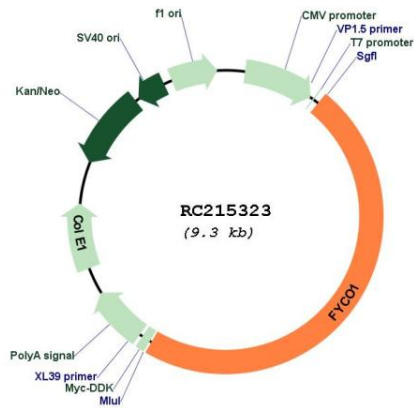


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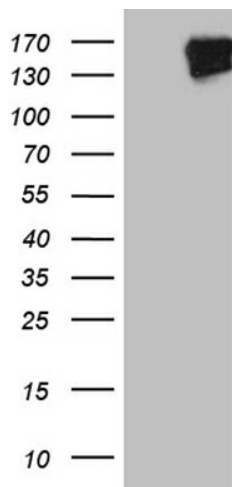
NM_024513

ORF Size:	4434 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_024513.4
RefSeq Size:	8518 bp
RefSeq ORF:	4437 bp
Locus ID:	79443
UniProt ID:	Q9BQS8
Cytogenetics:	3p21.31
MW:	167 kDa
Gene Summary:	The gene encodes a Rab7 adapter protein that is implicated in the microtubule transport of autophagosomes. The encoded protein contains a RUN domain, a FYVE-type zinc finger domain, and Golgi dynamics (GOLD) domain. The encoded protein plays a role in microtubule plus end-directed transport of autophagic vesicles through interactions with the small GTPase Rab7, phosphatidylinositol-3-phosphate (PI3P), the autophagosome marker LC3, and the kinesin KIF5. Mutations in this gene are associated with inclusion body myositis (IBM) and autosomal recessive congenital cataracts (CATC2). [provided by RefSeq, Aug 2020]

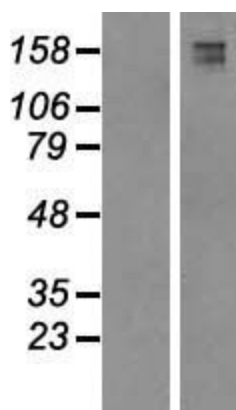
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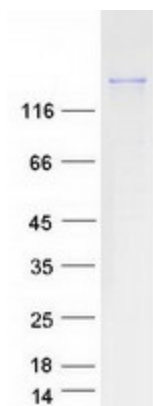
Circular map for RC215323



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FYCO1 (Cat# RC215323, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FYCO1 (Cat# [TA809860])(1:2000). Positive lysates [LY411258] (100ug) and [LC411258] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411258]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215323 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FYCO1 protein (Cat# [TP315323]). The protein was produced from HEK293T cells transfected with FYCO1 cDNA clone (Cat# RC215323) using MegaTran 2.0 (Cat# [TT210002]).