

Product datasheet for RC224747

Sperm Flagellar 2 (SPEF2) (NM_024867) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sperm Flagellar 2 (SPEF2) (NM_024867) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sperm Flagellar 2
Synonyms:	CT122; KPL2; SPGF43
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224747 representing NM_024867 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence:

>RC224747 representing NM_024867
 Red=Cloning site Green=Tags(s)

MSEILCQWLNKELKVSRTVSPKSFKAFSSGYLLGEVLHKFELQDDFSEFLDSRVSSAKLNNFSRLEPTL
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 FFFRLFADYEKDPQLDYTMQLLYFACHPDTVEGVYRALSVAVGTHVFQVQKASIPSAEKTSSDAGPAE
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 KK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8045_c03.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_024867

ORF Size: 5466 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.

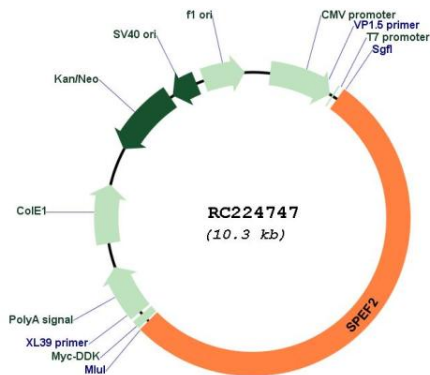
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:
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.

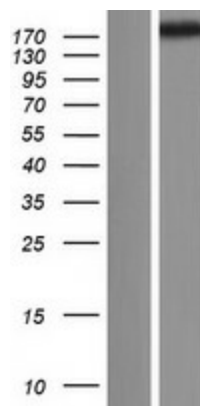
RefSeq: [NM_024867.4](#)
 RefSeq Size: 5655 bp
 RefSeq ORF: 5469 bp
 Locus ID: 79925
 UniProt ID: [Q9C093](#)
 Cytogenetics: 5p13.2
 MW: 209.6 kDa

Gene Summary: Required for correct axoneme development in spermatozoa. Important for normal development of the manchette and sperm head morphology. Essential for male fertility. Plays a role in localization of the intraflagellar transport protein IFT20 to the manchette, suggesting function as an adapter for dynein-mediated protein transport during spermatogenesis. Also plays a role in bone growth where it seems to be required for normal osteoblast differentiation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC224747



Western blot validation of overexpression lysate (Cat# [LY411032]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224747 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).