

Product datasheet for **RG228108**

Frataxin (FXN) (NM_001161706) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Frataxin (FXN) (NM_001161706) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: FXN
Synonyms: CyaY; FA; FARR; FRDA; X25
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228108 representing NM_001161706
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGACTCTCGGGCGCCGCGCAGTAGCCGGCCTCTGGCGTCACCCAGCCCAGCCCAGGCCAGACCC
TCACCCGGGTCCCGCGCCGCGCAGAGTTGGCCCCACTCTGCGGCCCGCTGGCCTGCGCACCGACATCGA
TGCGACCTGCACGCCCGCCGCGCAAGTTCGAACCAACGTGGCCTCAACCAGATTGGAATGTCAAAAAG
CAGAGTGTCTATTTGATGAATTTGAGGAAATCTGGAACCTTGGGCCACCCAGGCTCTCTAGATGAGACCA
CCTATGAAAGACTAGCAGAGGAAACGCTGGACTCTTTAGCAGAGTTTTTTGAAGACCTTGCAGACAAGCC
ATACACGTTTGGAGACTATGATGTCTCCTTTGGGAGTGGTGTCTTAAGTCAAACCTGGGTGGAGATCTA
GGAACCTATGTGATCAACAAGCAGACGCCAAACAAGCAAATCTGGCTATCTTCTCCATCCAGGTTAACGT
GGCTCCTGTGGCTGTTCCATCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228108 representing NM_001161706
Red=Cloning site Green=Tags(s)

MWTLGRRVAVGLLASPSPAQAQTLTRVPRPAELAPLCGRRGLRTRDIDATCTPRRASSNQRLNLIWVKK
QSVYLMNLRKSGTLGHPGSLDETTYERLAETLDSLAEFFEDLADKPYTFEDYDVSFGSGVLTVKLGGDL
GTYYINKQTPNKQIWLSSPSRLTWLLWLFHP

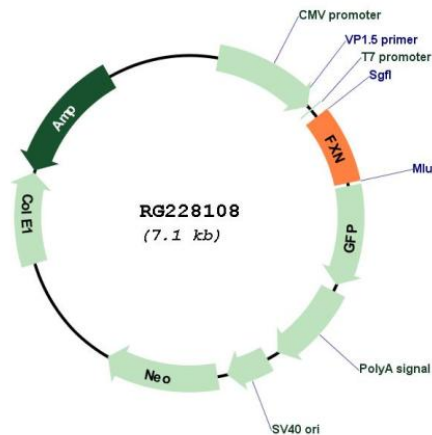
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001161706

ORF Size: 513 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:	<u>NM_001161706.1, NP_001155178.1</u>
RefSeq Size:	980 bp
RefSeq ORF:	516 bp
Locus ID:	2395
UniProt ID:	<u>Q16595</u>
Cytogenetics:	9q21.11
Protein Families:	Druggable Genome
Gene Summary:	This nuclear gene encodes a mitochondrial protein which belongs to the FRATAXIN family. The protein functions in regulating mitochondrial iron transport and respiration. The expansion of intronic trinucleotide repeat GAA from 8-33 repeats to >90 repeats results in Friedreich ataxia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2016]