

Product datasheet for **RG225431**

SPG21 (NM_001127889) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPG21 (NM_001127889) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SPG21
Synonyms:	ABHD21; ACP33; BM-019; GL010; MAST
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225431 representing NM_001127889 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGGAGAGATTAAGTCTCTCCTGATTATAACTGGTTTAGAGGTACAGTCCCTTAAAAAGATTATTG
 TGGATGATGATGACAGTAAGATATGGTCGCTCTATGACGCGGGCCCCGAAGATCAGGTGTCCTCTCAT
 ATTCCTGCCCCGTGTCAGTGGAACTGCAGATGTCTTTTCCGGCAGATTTGGCTCTGACTGGATGGGGT
 TACCGGGTTATCGCTTTCAGTATCCAGTTTATTGGGACCATCTCGAGTCTGTGATGGATTAGAAAAAC
 TTTTAGACCATTTACAATTGGATAAAGTTCATCTTTTGGCGCTTCTTTGGGAGGCTTTTGGCCAGAA
 ATTTGCTGAATACACTCACAATCTCCTAGAGTCCATTCCCTAATCCTCTGCAATTCCTTCAGTGACACC
 TCTATCTTCAACCAAACTTGGACTGCAAAACAGCTTTTGGCTGATGCCTGCATTTATGCTCAAAAAATAG
 TTCTTGAAATTTTTCATCTGGCCCGGTGGACCTATGATGGCTGATGCCATTGATTTTCATGGTAGACAG
 GCTAGAAAGTTTGGGTCAGAGTGAAGTGGCTTCAAGACTTACCTGAATTGTCAAAATCTTATGTGGAA
 CCTCATAAAATTCGGGACATACCTGTAAGTATTATGGATGTGTTTGATCAGAGTGCAGCTTTCAACTGAAG
 CTAAAGAAGAAATGTACAAGCTGTATCCTAATGCCGAAGAGCTCATCTGAAAACAGGAGGCAATTTCCC
 ATACCTGTGCAGAAGTGACAGAGTCAATCTTTATGTACAGATACATTTGCTGCAATTCATGGAACCAAA
 TACGCGGCCATTGACCCATCAATGGTCAGTGCCGAGGAGCTTGAGGTGCAGAAAGGCAGCCTTGGCATCA
 GCCAGGAGGAGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG225431 representing NM_001127889
 Red=Cloning site Green=Tags(s)

MGEIKVSPDYNWFRGTVPLKKIIVDDDDSKIWSLYDAGPRSRCPILFLPPVSGTADVFFRQILALTGWG
 YRVIALQYPVYWDHLEFCDGFRLKLDHLQLDKVHLFGASLGGFLAQKFAEYTHKSPRVHSLILCNSFSDT
 SIFNQWTANSFWLMPAFMLKKIVLGNFSSGPVDPMMADAIDFMVDRLESLGQSELASRLTLNCQNSYVE
 PHKIRDIPVTIMDVFDQSALSTEAKEEMYKLYPNARRAHLKTGGNFPYLCRSAEVNLYVQIHLLQFHGTK
 YAAIDPSMVSAAEELEVQKGSLSQEEQ

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001127889

ORF Size: 924 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_001127889.5](#)

RefSeq Size: 1635 bp

RefSeq ORF: 927 bp

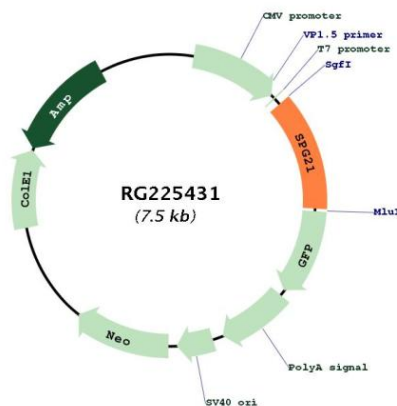
Locus ID: 51324

UniProt ID: [Q9NZD8](#)

Cytogenetics: 15q22.31

Gene Summary: The protein encoded by this gene binds to the hydrophobic C-terminal amino acids of CD4 which are involved in repression of T cell activation. The interaction with CD4 is mediated by the noncatalytic alpha/beta hydrolase fold domain of this protein. It is thus proposed that this gene product modulates the stimulatory activity of CD4. Mutations in this gene are associated with autosomal recessive spastic paraplegia 21 (SPG21), also known as mast syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2014]

Product images:



Circular map for RG225431