

Product datasheet for **MG218533**

Gsap (NM_175437) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gsap (NM_175437) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gsap
Synonyms:	A530088I07Rik; Pion
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG218533 representing NM_175437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCTCTGCGGCTGGTCACTCACTTCGATGTGCTGGAGGACGTGCTCCCGAGTCTGCTCACACAGGCGG
 CGACAACGGACGAAGGAGACAGAGCAGGTGTTTTAGAAACAATTATGGGAGCTTACGTGTACTAAACAT
 CGAAAGAAATGGAACATTATTTATACCTATAAGGACAATAAGGGAAACGCTGTTTTGGATTATATGAT
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 ACAGTGAGAGAACAGTGTCTGCTGCGAGTTTCATTAGTATACCACAGAGGGAGTAAAGAATGACCTTCA
 GCCAGGATCGAAGTGCCTAATTTGCTGGTAGAAATACACCCTGTTAACAACTGAAGGTTCTGAAAGCA
 GTGGATAGCTGTGTTGGGTACAGTTCTCTACCCACAAGCTGAAAGTCATCTTCTCCACAGAACACC
 TGCTACTGATCTCAGAAGAGAAATATATTGAGCGGTTTCATATCCAGATCACCAGAGAAGATGGAGACAG
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 GCAGAATTTGTAGAGGAAGCTGCTCTGAAACACACCACCATGCTTTTGGGCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG218533 representing NM_175437
 Red=Cloning site Green=Tags(s)

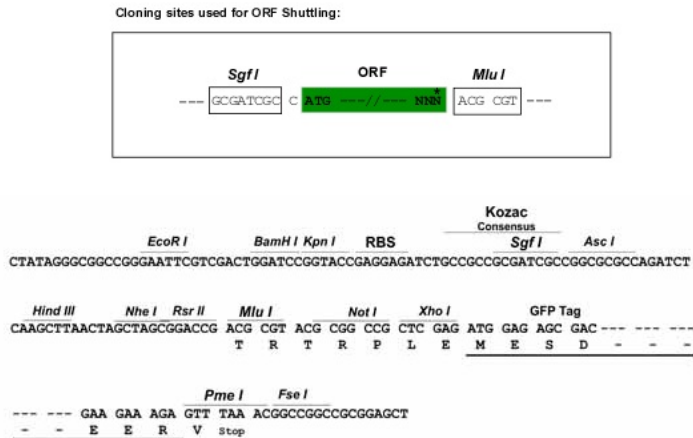
MALRLVTHFDVLEDVLPSSLTQAATTDEGDRAGVLETTYGSLRVLNIERNGNIIYTYKDNKGNVFGLYD
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 EERTGKRRSTMYVRNILENAMKVIASMETRTLEPRLIPFLQEEDRHQRLLMGLMVSELRDHLRLHQLQGV
 KKKIEQMVLVDYISKLLDLWCLLETSSWRKHSMPVLHLNSHCSAADFEVFLMTRILDAASSLCLPLPP
 GFHSLHTILGVHCLPLYSLHIDNGVLLLTETAVTRLMKDLNSEKNEQLKFSIIVRLPPLIGQKVCRL
 WDHPMSSNII SRNHVARLLKNYRKEPRNSMIDKSSFPVEFLPLNYFIEILMGLESSNQALYGFEGHDNVD
 AEFVEEAALKHTTMLLGL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN:	NM_175437
ORF Size:	2574 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_175437.3](#), [NP_780646.2](#)

RefSeq Size: 3745 bp

RefSeq ORF: 2577 bp

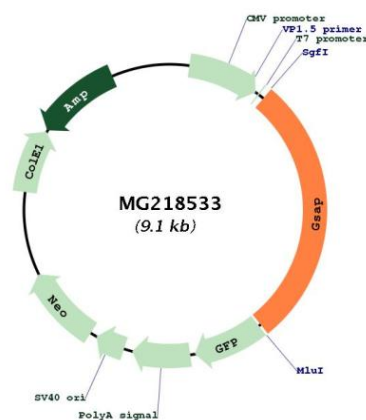
Locus ID: 212167

UniProt ID: [Q3TCV3](#)

Cytogenetics: 5 A3

Gene Summary: Regulator of gamma-secretase activity, which specifically activates the production of amyloid-beta protein (amyloid-beta protein 40 and amyloid-beta protein 42), without affecting the cleavage of other gamma-secretase targets such as Notch. The gamma-secretase complex is an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid-beta precursor protein). Specifically promotes the gamma-cleavage of APP CTF-alpha (also named APP-CTF) by the gamma-secretase complex to generate amyloid-beta, while it reduces the epsilon-cleavage of APP CTF-alpha, leading to a low production of AICD.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG218533