

## Product datasheet for **MG210794**

### Suv420h1 (BC075709) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Suv420h1 (BC075709) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Suv420h1
Synonyms:	MGC18702, Suv4-20h1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>MG210794 representing BC075709  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAAGTGGTTGGGAGACTCCAAGAACATGGTGGTGAATGGCAGGAGAAATGGAGGCAAGTTGTCTAATG  
ACCATCAGCAGAATCAATCAAAATTACAGCAGCACTCGGGCAAGGACACCCTGAAGACCGGCAGAAACGC  
CGTTGAGAGGCGGTCCAACAGATGTCATGGTAACTCGGGATTTGAAGGGCAGAGCCGCTATGTGCCGTCC  
TCTGGAATGTCCGCCAAGGAGCTCTGTGAGAACGATGACTTAGCAACCAGTTTGGTTCTTGATCCCTACT  
TAGGTTTTTTCAGACACACAAAATGAACACTAGATTTTCGGCTATAAAAAGGAAGGCAAGAAGAGCTAAAGGA  
AGTAATTGAACGCTTTAAGAAAGATGAACACTTAGAGAAAGCTTTCAAATGTTTGACTTCTGGGGAATGG  
GCACGGCATTATTTCTCAACAAAACAAAATGCAGGAGAAATATTCAAGGAACATGTCTTTATTTACT  
TGCGGATGTTTGAACACTGACAGTGGATTTGAAATACTGCCTTGTAAATAGATATTCTTCAGAACAAAATGG  
AGCCAAGATAGTTGCAACAAAAGAGTGGAAACGAAATGACAAAATAGAATTACTGGTGGGTGTATTGCC  
GAACCTTCAGAAAATTGAGGAGAACATGCTACTTAGACACGGAGAAAACGACTTCAGTGTCAATGTATTCCA  
CAAGGAAAAAATTGTGCTCAACTCTGGCTCGGTCCTGCTGCATTTATAAATCATGATTGCAGACCTAACTG  
TAAGTTTGTGTCAACTGGTTCGAGATACAGCATGTGTTAAGGCTCTGAGAGATATTGAACCTGGAGAAGAA  
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GACGGGAACTGGTGCTTTTAAATCACGAGTAGGACTGCCTGCGCCTGCTCTGTATCAATAGCAAATA  
CGGACTTAGAGAAACAGATAAACGCTTAAATAGGCTTAAAAAGTTAGGTGACAGCAGCAAAAACCTCAGAC  
AGTCAGTCTGTCAGCTCTAACACAGATGCAGACACCCTCAGGAAAAAGACAATGCAACTCTAATCGAA  
AATCTTCAGTTGGTGTGAAAAAGAGCAGCAAGAGTCGAGCTCTGACGAGGCGCTCCATGCCGAGTCCC  
GGCTGCTTCCAACCTACCTCAGCCAAGCTAGTGCACACCAACAATCCCCGGGTACCAAAGAAACTGAGA  
AAGCCGGCAAAGCCTTTACTCTCCAAGATCAGACTGCGGAATCACTGCAAGCGGCTGGACCAAGAAGAGCG  
CATCCCCGCAAGCTCGAGATGGGAGCTTAGTGCTTAAGGAGCCAAAGTTGTGCTATATAAAAAATTTGCC  
AATTAAGAAAGAAAGGGAGCCAGAGGGACCAGCCATGCTGCAGTGGGAGTGGGTGCTTGACTAGACAT  
GCTGCGAGAGAACACAGGCAGAGTCATGGGAGAGGTGCTCATTGCGAGGGCGACAGTTTGCCTGCACCT  
ACACAACCCGGCGCTCTTTGAGGACAAGGACAGGTCTGAAGGAGACCCTGACATCAAGCTTGAACCAAG  
TCCCTTGGATGGCTATAAAAAATGGTATACTGGAACCTTGCCAGACAGTGGCCAGCAGCCAACCCAGAG  
GTGCTGGAAGAACTGGCTCCTGAGACTGCACACAGGGAGGAAGCATCCCAGGAGTGTCCCAAGAACGACT  
CCTGCCTGTACGAAAGAAATTTGACAAAGTAAACCTGTGAAACACTTAGCAAAGACAGAGGACTGCAG  
TCCAGAGCACAGCTTCCCTGGGAAAGACGGGCTGCCAGATTTGCCAGGCTCATCCTGATCAAGGTGAG  
CCCAGTGGCACAGTCAAGGTGCCGTGAGCTACACGGACTCTGCTCCCTCACCGTTGGCTGCTCTGTTG  
TCACACCCGACAGCTTCAAAAAGACAGCTTCAAGACTGCACAAAGTAAAAAGAAGCGGCGGGTCAACAG  
GTACGATGCACAGCTGATCCTGGAGAACAGCTCTGGAATCCCCAAGCTGACGCTTCGACAGGCGGCACGAC  
AGCAGCAGCAAGACAAACGACCATGAGAGTACAGGCGTGAACCTCCTCAAGATCAGCATCAAACCTCAGCA  
AGGACCACGACAGTGCAGCAACCTCTATGTTGCCAAGCTCAGTAACGGGGTCAAGCGGGGCGGGCAG  
CAGCTCCACCAAGCTCAAGATCCAGCTCAAGCGGGATGAGGAGAGCAGGGGGCCATGTGCAGAGGGCTG  
CACGAGAACGGGGTGTGCTGCAGCGACCCCTCTCCCTGCTCGAGTCCCAGATGGAGGTGGACACTACA  
GTCAATATGAGGAGGACAGCACAGATGAATCCTCATCTTCTCCGGCAAAGCGGCTGAGGCTAATTGTTG  
G

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210794 representing BC075709  
 Red=Cloning site Green=Tags(s)

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MKWLGDSKNMNVNRRNGGKLSNDHQNQSKLQQHSGKDTLKTGRNAVERRSNRCHGNSGFEGQSRVYVPS
SGMSAKELCENDDLATSLVLDPYLGFQTHKMNTRFRPIKGRQEELKEVIERFKKDEHLEKAFKCLTSGEW
ARHYFLNKNMQEKLKFEHVFIYLRMFATDSGFEILPCNRYSSSEQNGAKIVATKEWKRNDKIELLVGCIA
ELSEIEENMLLRHGENDFSVMYSTRKNCAQLWLGPAAFINHDCRPNCKFVSTGRDTACVKALRDIEPGEE
ISCYYGDGFFGENNEFCECYTCERRGTGAFKSRVGLPAPAPVINSKYGLRETDKRLNRLKKLGDSSKNSD
SQSVSSNTDADTTQEKNATSNRKSSVGKSSKSRALTRPSMPRVPAASNSTSAKLVHTNPNRPVKCLR
KPAKPLLKIRLRNHCKRLDQKSASRKLEMGSLVLKEPKVVLKYNLPIKKEREPEGPAHAAVSGCLTRH
AAREHRQSHGRGAHSQGDSPCTYTRRSLRTRTGLKETTDIKLEPSPLDGYKNGILEPCPDGSGQQPTPE
VLEELAPETAHREEASQECPKNDSCLSRKKFRQVKPVKHLAKTEDCSPEHSFPGKDGLPDLPGSHPDQGE
PSGTVRVPVSYTDSAPSPVGCSSVTPDSFTKDSFRTAQSKKKRRVTRYDAQLILENSSGIPKLTLLRRRHD
SSSKTNDHESDGVNSSKISIKLSKDHDSDSNLYVAKLSNGVSAGPGSSSTKLIQLKRDEESRGPCAEGE
HENGVCSDPLSLLSQMEVDDYSQYEEEDSTDESSSSSGKAAEANCW
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



*EcoRI*
*BamHI* *KpnI*
RBS
Kozac  
Consensus
*SgfI*
*AscI*

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

*HindIII*
*NheI* *RsrII*
*MluI*
*NotI*
*XhoI*
GFP Tag

CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

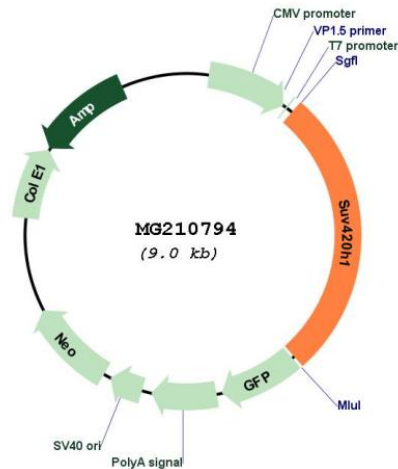
T R T R P L E
M E S D - - -

*PmeI*
*FseI*

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - E E R V Stop

Plasmid Map:



ACCN: BC075709

ORF Size: 2451 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: [BC075709.1](#)

RefSeq Size: 3901 bp

RefSeq ORF: 2453 bp

Locus ID: 225888

Cytogenetics: 19 A

**Gene Summary:**

Histone methyltransferase that specifically trimethylates 'Lys-20' of histone H4. H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression. Mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. KMT5B is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2). Plays a role in myogenesis by regulating the expression of target genes, such as EID3.[UniProtKB/Swiss-Prot Function]