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Product datasheet for RC207671

MATH5 (ATOH7) (NM_145178) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MATH5 (ATOH7) (NM_145178) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MATH5
Synonyms:	bHLHa13; Math5; NCRNA; PHPVAR; RNANC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC207671 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTCCTGCAAGCCCAGCGGCCCGCCGGCGGGAGCGCGCGTTGCACCCCCGTGCGCGGGCGGCACCG
AGTGCGCGGGCACGTGCGCCGGGGCCGGGCGGCTGGAGAGCGCGGCGCGCAGGCGCCTGGCGGCCAACGC
GCGCGAGCGCCGCCGCATGCAGGGGCTCAACACTGCCTTCGACCGCTTACGCAGGGTGGTTCCCCAGTGG
GGCCAGGATAAAAAGCTGTCCAAGTACGAGACCCTGCAGATGGCCCTGAGCTACATCATGGCTCTGACCC
GGATCCTGGCCGAGGCCGAGCGATTCGGCTCGGAGCGGGACTGGGTGGGTCTCCACTGTGAGCACTTCGG
CCGCGACCACTACCTCCCGTTCCCGGGCGCGAAGCTGCCGGGCGAGAGCGAGCTGTACAGCCAGAGACTC
TTCGGCTTCCAGCCCGAGCCCTTCCAGATGGCCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207671 protein sequence
Red=Cloning site Green=Tags(s)

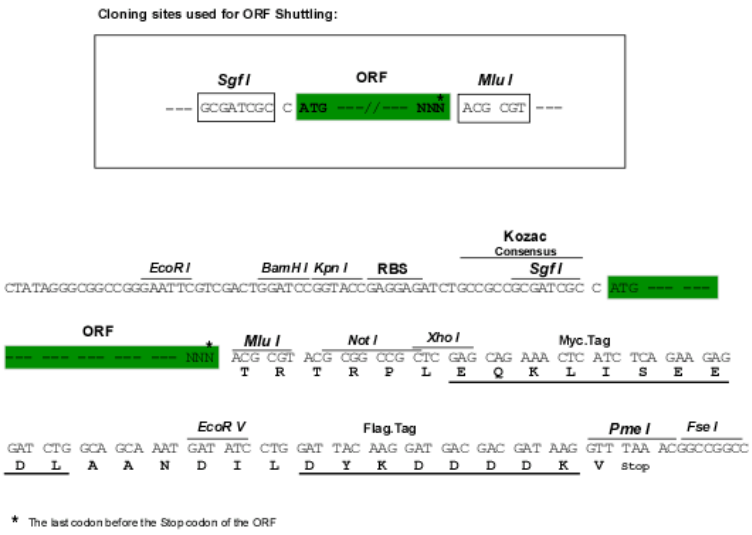
MKSCKPSGPPAGARVAPPCAGGTECAGTCAGAGRLESAARRRLAANARERRRMQGLNTAFDRLRRVVPQW
GQDKKLSKYETLQMALSYIMALTRILAEAERFGSERDWVGLHCEHFGRDHYLPFPGAKLPGESELYSQRL
FGFQPEPFQMAT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_145178

ORF Size: 456 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

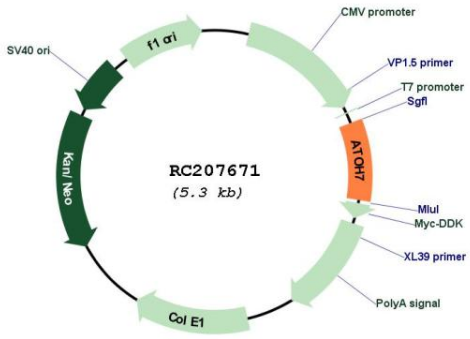
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

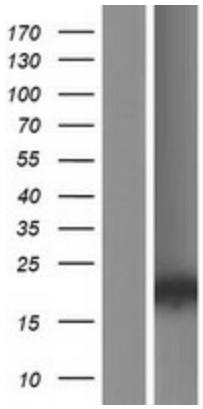
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_145178.4
RefSeq Size:	1534 bp
RefSeq ORF:	459 bp
Locus ID:	220202
UniProt ID:	Q8N100
Cytogenetics:	10q21.3-q22.1
Protein Families:	Transcription Factors
MW:	16.9 kDa
Gene Summary:	This intronless gene encodes a member of the basic helix-loop-helix family of transcription factors, with similarity to Drosophila atonal gene that controls photoreceptor development. Studies in mice suggest that this gene plays a central role in retinal ganglion cell and optic nerve formation. Mutations in this gene are associated with nonsyndromic congenital retinal nonattachment. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RC207671



Western blot validation of overexpression lysate (Cat# [LY408040]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207671 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).