

Product datasheet for **RR207882**

Gas8 (NM_001039030) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gas8 (NM_001039030) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gas8
Synonyms:	MGC124779
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR207882 representing NM_001039030
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCACCCAAAAGGAGAGGGAAGAAAGGAAAGCCAAAGGGAATGCAGTCGTTGATGGGGTGCACCAG
 AGGACATGTCCAAGGAGCAGGTGGAGGAACATGTCGCCCGCATCCGGGAGGAGCTGGACCGGAGCGGGA
 GGAGCGCAACTACTTTTCAGCTGGAGCGGGACAAAATCCACACCTTCTGGGAGATCACGGGAGGCAGCTG
 GAGGAGAAGAAGGCTGAGCTGCGCAACAAAGACCGGGAGATGGAGGAGCCGAGGAGAGGCACCAGGTGG
 AGATCAAGGTTTACAAGCAGAAAGTGAAGCACCTTCTGTACGAACACCAGAACAATCTGGCAGAGGTGAA
 GACTGAGGGCACCGTGGTCATGAAGCTGGCCAGAAGGAGCACCGCGCCAAAGAGGGCGCTCTGCGCAAG
 GACATGCGCGTGTGAAAGTGGAGCTGAAGGAGCAGGAGCTGGCTAACGAGGTGGTGATAAAGAACCTGC
 GTCTGAAACAAGCCGAGGAGATACCAAGATGCGAAATGACTTTGAAAGGCAAGTTCGAGAAATCGAGGC
 CAAATATGATAAAAAGATGAAGATGCTTCGAGACGAGCTTGACCTGCGGAGAAAGACTGAGATCCACGAG
 GTGGAGGAGAGGAAGAACGGGCAGATCAGTACGCTGATGCAGCGTCATGAGGAGGCTTCACTGACATCA
 AAAACTACTACAATGACATCACTCTCAACAACCTGGCCCTCATCAATTCCTCAAGGAGCAGATGGAGGA
 TATGAGGAAGAAGGAGGAGTACCTGGAGAGGGAGATGGCGGAGGTGTCTCTGCAGAAACAGCGGCTGGCT
 GAGCCGCTGCAGAGAGCCAAGGAGGAGATGAGCGAGATGCAGAAGAGACTGGGGAACCATGAGAGGGACA
 AGCAGATCCTGGCCTGTACGAAGGCACGTTTGAAGTCACTGAGAAGGAGCTGAAGGACCTGAAGTGGGA
 GCATGAGATCCTGGAGCAGAGGTTTCATCAAGGTGCAGCAGGAGAGGGAAGAGCTCTATCGGAAGTTCAC
 GCAGCCATCCAGGAGGTGCAGCAGAAGACAGGCTTCAAGAACCTGGTGGTGGAGCGTAAGCTGCAGGCAC
 TGAATGCTGTGGAGAAGAGAGAGGTCAGTTCATGAGGTGCTGGCTGCCTCCAACCTGCACCTAC
 AGCACTAACACTTGTGTCTCGCAAACCTGAGGAGCTTCTAGAGTCGAAGAATAACCACCATCAAGGACTTG
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 CCTTCGGGATCCCCCTGGACAATGTGGGGTTCAAGCCCTGGAGACAGCAGTGATTGGACAGACTGGG
 ACAGGGCCCTGCAGGACTTGTGGGTGCGCCGACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR207882 representing NM_001039030
 Red=Cloning site Green=Tags(s)

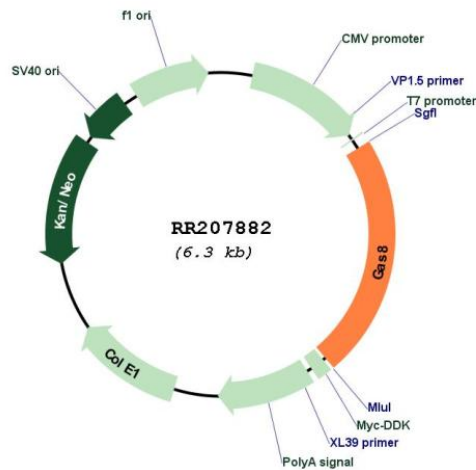
MAPKRRGKKGKAKGNAVVDGVAPEDMSKEQVEEHVARIREELDREREERNYFQLERDKIHTFWEITRRQL
 EEKKAELRNKDREMEEAERHQVEIKVYKQVKHLLYEHQNNLAEVKTEGTVMKLAQKEHRAQEGALRK
 DMRVLKVELKEQELANEVVIKNLRLKQAEETKMRNDFERQVREIEAKYDKMKMLRDELDLRRKTEIHE
 VEERKNGQISTLMQRHEEAFDINKYNDITLNNLALINSLKEQMEDMRKKEEYLEREMAESLQNKRLA
 EPLQRAKEEMSEMQRKLGNERDKQILACTKARLKVTEKELKDLKWEHEILEQRFIKVQQEREELYRKFT
 AAIQEVQKTGFKNLVLERKLQALNAAVEKREVFNEVLAASNLDPALTLVSRKLEDVLESKNNTIKDL
 QYELARVCKAHNDLLRITYEAKLLAFGIPLDNVGFKPLETAVIGQTLGQGPAGLVGAPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001039030

ORF Size: 1434 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_001039030.1](#), [NP_001034119.1](#)

RefSeq Size: 1602 bp

RefSeq ORF: 1437 bp

Locus ID: 361438

UniProt ID: [Q499U4](#)

Cytogenetics: 19q12

MW: 56.3 kDa

Gene Summary: Component of the nexin-dynein regulatory complex (N-DRC), a key regulator of ciliary/flagellar motility which maintains the alignment and integrity of the distal axoneme and regulates microtubule sliding in motile axonemes. Plays an important role in the assembly of the N-DRC linker. Plays dual roles at both the primary (or non-motile) cilia to regulate hedgehog signaling and in motile cilia to coordinate cilia movement. Required for proper motile cilia functioning. Positively regulates ciliary smoothed (SMO)-dependent Hedgehog (Hh) signaling pathway by facilitating the trafficking of SMO into the cilium and the stimulation of SMO activity in a GRK2-dependent manner.[UniProtKB/Swiss-Prot Function]