

Product datasheet for MC210192

Bhlhe22 (NM_021560) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Bhlhe22
Synonyms:	Beta3; Beta3a; Bhlhb5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC210192 representing NM_021560 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGAACGCGGGTTGCACCTCGGTGCGGCGGCCGCGAGCGAAGACGACCTCTTCTGCACAAGAGCCTGG
GCACCTCCGCCGCCAAGCGCCTGGAGGCGGCTTTTCGCTCCACACCCCGGGCATGGACCTGTCCCTGGC
GCCTCCAACTCGCGAAGCGCCGGCGTCGTCTCGTCCGCTCGCCCCCGGCTGTTTCGAGCCCGCTGATCCCGAA
GGGCTGGGCTGCTGCTCCCTCCGCCGAGGAGCGGTGGCGGAGCGGCGGCGGCGGGGTGAGTG
TCCCGGGGCTGCTCGTGGGCTCAGCGGGCGTGGGGGGCGAGCCGAGCCTGAGCAGCCTGCCGCGGGGGC
TGCCCTGTGCTCAAGTACGGCGAGAGCGCCGACGCGCTCCGTGGCCGAGAGCAGCGGGGGCGAGCAG
AGCCCCGACGACGACGAGCGCGCCGCTGCGAGCTGGTGTGCGAGCCGGGGGCCCGACCCGCGGGCAT
CGCCGGGAGCGGGGGCGGAGCGCAAGGTGGCCGAGGGCTGCTCCAACGCCCACTTGATGGTGGCTC
GGGCTCCCCCGGGGGGCCCAAGTGGCGGCGGAAGCGGCGGCGGTGGCGGCGGAGCAGCAAGAAA
TCCAAAGAGCAGAAGCGTTGCGCCTCAACATCAACGCTCGCGAGCGCCGAGGATGCACGACCTGAACG
ACGCTCTGGATGAGCTGCGCGCGGTATTCTTACGCGCACAGCCCTTCAGTGCAGGAAGCTCTCCAAAT
CGCCACGCTGCTCCTCGCAAGAACTACATCTCATGACGACAGGCCCTGGAGGAAATGCGGCGCTTA
GTCGCTACCTCAACCAAGGCCAGGCCATCTCGGAGCCTCTTCCAGCTCCGCGGCGCGGCTGCGG
CGGCGCTGCCCTGCACCGGCGCTCGGCGCTACGAGCAGCGGCGGCTACCCGTTCAGTGCAGGGCT
GCCGCCGCTGCTCTGCCCGAGAAGTGTGCCCTATTCAACAGCGTCTCGTCCAGCCTCTGCAACAG
TGCACGAGAAGCCTTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



ACCN:	NM_021560
Insert Size:	1068 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
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_021560.4 , NP_067535.3
RefSeq Size:	3207 bp
RefSeq ORF:	1068 bp
Locus ID:	59058
UniProt ID:	Q8C6A8
Cytogenetics:	3 A1

Gene Summary:

Inhibits DNA binding of TCF3/E47 homodimers and TCF3 (E47)/NEUROD1 heterodimers and acts as a strong repressor of Neurod1 and Myod-responsive genes, probably by heterodimerization with class a basic helix-loop-helix factors. Despite the presence of an intact basic domain, does not bind to DNA (By similarity). In the brain, may function as an area-specific transcription factor that regulates the postmitotic acquisition of area identities and elucidate the genetic hierarchy between progenitors and postmitotic neurons driving neocortical arealization. May be required for the survival of a specific population of inhibitory neurons in the superficial laminae of the spinal chord dorsal horn that may regulate pruritis. Seems to play a crucial role in the retinogenesis, in the specification of amacrine and bipolar subtypes. Forms with PRDM8 a transcriptional repressor complex controlling genes involved in neural development and neuronal differentiation (PubMed:22284184).[UniProtKB/Swiss-Prot Function]