

Product datasheet for **MR222114**

Batf (NM_016767) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Batf (NM_016767) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Batf
Synonyms: B-ATF; SFA-2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR222114 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCTCACAGCTCCGACAGCAGTGACTCCAGCTTCAGCCGCTCTCTCCCCCTGGCAAACAGGACTCAT
CTGATGATGTGAGGAAAGTTCAGAGGAGAGAGAAGAATCGCATCGCTGCCAGAAGAGCCGACAGAGACA
GACACAGAAAGCCGACACCCTTCACCTGGAGAGTGAGGACCTGGAGAAACAGAACGCAGCTCTCCGCAA
GAGATCAAACAGCTCACCAGGAGCTCAAGTACTTCACATCAGTGCTGAGCAGCCACGAGCCCCTGTGCT
CCGTGCTGGCCAGTGGCACCCCCTCGCCCCCGAGGTGGTATACAGTGCCCATGCCTTCCACCAGCCTCA
CATCAGCTCGCCACGCTTCCAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222114 protein sequence
Red=Cloning site Green=Tags(s)

MPHSSDSSDSSFSRSPPGKQDSSDDVRKVQRREKNRIAAQKSRQRQTQKADTLHLESEDLKQNAALRK
EIKQLTEELKYFTSVLSSSHEPLCSVLASGTPSPPEVVYSAHAFHQPHISSPRFQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

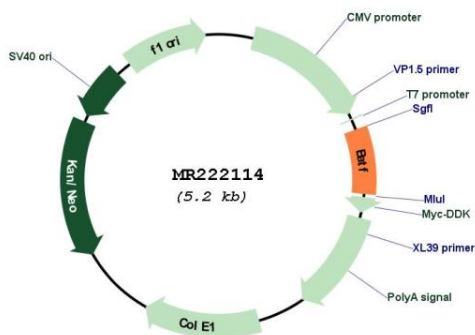


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RefSeq ORF:	378 bp
Locus ID:	53314
UniProt ID:	O35284
Cytogenetics:	12 D2
MW:	14.1 kDa

Gene Summary:

AP-1 family transcription factor that controls the differentiation of lineage-specific cells in the immune system: specifically mediates the differentiation of T-helper 17 cells (Th17), follicular T-helper cells (Tfh), CD8(+) dendritic cells and class-switch recombination (CSR) in B-cells. Acts via the formation of a heterodimer with JUNB that recognizes and binds DNA sequence 5'-TGA[CG]TCA-3'. The BATF-JUNB heterodimer also forms a complex with IRF4 (or IRF8) in immune cells, leading to recognition of AICE sequence (5'-TGAnTCA/GAAA-3'), an immune-specific regulatory element, followed by cooperative binding of BATF and IRF4 (or IRF8) and activation of genes. Controls differentiation of T-helper cells producing interleukin-17 (Th17 cells) by binding to Th17-associated gene promoters: regulates expression of the transcription factor RORC itself and RORC target genes such as IL17 (IL17A or IL17B). Also involved in differentiation of follicular T-helper cells (Tfh) by directing expression of BCL6 and MAF. In B-cells, involved in class-switch recombination (CSR) by controlling the expression of both AICDA and of germline transcripts of the intervening heavy-chain region and constant heavy-chain region (I(H)-C(H)). Following infection, can participate in CD8(+) dendritic cell differentiation via interaction with IRF4 and IRF8 to mediate cooperative gene activation. Regulates effector CD8(+) T-cell differentiation by regulating expression of SIRT1. Following DNA damage, part of a differentiation checkpoint that limits self-renewal of hematopoietic stem cells (HSCs): up-regulated by STAT3, leading to differentiation of HSCs, thereby restricting self-renewal of HSCs.[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MR222114