

# **Product datasheet for RC236967**

## OriGene Technologies, Inc.

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## HSPC142 (BABAM1) (NM\_001288757) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: HSPC142 (BABAM1) (NM\_001288757) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: BABAM1

Synonyms: C19orf62; HSPC142; MERIT40; NBA1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236967 representing NM\_001288757
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ATGGAAGTGGCAGAGCCCAGCAGCCCCACTGAAGAGGAGGAGGAGGAGGAGGAGCACTCGGCAGAGCCTC
GGCCCCGCACTCGCTCCAATCCTGAAGGGGCTGAGGACCGGGCAGTAGGGGCACAGGCCAGCGTGGGCAG
CCGCAGCGAGGGTGAGGGTGAGGCCGCCAGTGCTGATGATGATGGGAGCCTCAACACTTCAGGAGCCGGCCCT
AAGTCCTGGCAGGTGCCCCCGCCAGCCCCTGAGGTCCAAATTCGGACACCAAGGGTCAACTGTCCAGAGA
AAGTGATTATCTGCCTGGACCTGTCAGAGGAAATGTCACTGCCAAAGCTGGAGTCGTTCAACGGCCAGCA
GAAAACTGAGCTTCCGGTCACAGAGAACGTGCAGACGATTCCCCCGCCATATGTGGTCCGCACCATCCTT
GTCTACAGCCGTCCACCTTGCCAGCCCCCAGTTCTCCTTGACGGAGCCCATGAAGAAAATGTTCCAGTGCC
CATATTTCTTTTTGACGTTGTTTACATCCACAATGGCACTGAGGAGAAGGAGGAGGAGATGAGTTGGAA
GGATATGTTTGCCTTCATGGGCAGCCTGGATACCAAGGGTACCAGCTACAAGTATGAGGTGGCACTGGCT
GGGCCAGCCCTGGAGTTGCACAACTGCATGGCGAAACTGTTGGCCCACCCCCTGCAGCGGCCTTGCCAGA
GCCATGCTTCCTACAGCCTGCTGGAGGAGGAGGAGGAGGAGGACCATTTCCCAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC236967 representing NM\_001288757

Red=Cloning site Green=Tags(s)

MEVAEPSSPTEEEEEEEHSAEPRPRTRSNPEGAEDRAVGAQASVGSRSEGEGEAASADDGSLNTSGAGP KSWQVPPPAPEVQIRTPRVNCPEKVIICLDLSEEMSLPKLESFNGQQKTELPVTENVQTIPPPYVVRTIL VYSRPPCQPQFSLTEPMKKMFQCPYFFFDVVYIHNGTEEKEEEMSWKDMFAFMGSLDTKGTSYKYEVALA GPALELHNCMAKLLAHPLQRPCQSHASYSLLEEEDEAIEVEATV

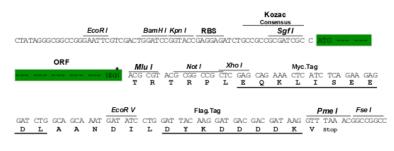
#### **TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Restriction Sites:** 

Sgfl-Mlul

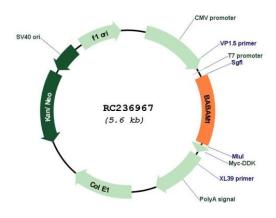
**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

## Plasmid Map:



**ACCN:** NM\_001288757

ORF Size: 762 bp

#### HSPC142 (BABAM1) (NM\_001288757) Human Tagged ORF Clone - RC236967

**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: <u>NM 001288757.1</u>, <u>NP 001275686.1</u>

 RefSeq Size:
 1280 bp

 RefSeq ORF:
 765 bp

 Locus ID:
 29086

 UniProt ID:
 Q9NWV8

Cytogenetics: 19p13.11

**MW:** 28.6 kDa

**Gene Summary:** Component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked

ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX. In the BRCA1-A complex, it is required for the complex integrity and its localization at DSBs. Component of the BRISC complex, a multiprotein

complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates

(PubMed:24075985, PubMed:26195665). In these 2 complexes, it is probably required to maintain the stability of BABAM2 and help the 'Lys-63'-linked deubiquitinase activity mediated by BRCC3/BRCC36 component. The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiquitinating

NUMA1 (PubMed:26195665). Plays a role in interferon signaling via its role in the

deubiquitination of the interferon receptor IFNAR1; deubiquitination increases IFNAR1 activity by enhancing its stability and cell surface expression (PubMed:24075985). Down-regulates the

response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiquitination

(PubMed:24075985).[UniProtKB/Swiss-Prot Function]