

Product datasheet for RC220122

BAG2 (NM_004282) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BAG2 (NM_004282) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BAG2
Synonyms:	BAG-2; dj41711.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220122 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCAGGCGAAGATCAACGCTAAAGCCAACGAGGGGCGTTCTGCCGCTCCTCCTCCATGGCTGACC
GCTCCAGCCGCCTGCTGGAGAGCCTGGACCAGCTGGAGCTCAGGGTTGAAGCTTTGAGAGAAGCAGCAAC
TGCTGTTGAGCAAGAGAAAGAAATCCTTCTGGAAATGATCCACAGTATCCAAAATAGCCAGGACATGAGG
CAGATCAGTGACGGAGAAAGAGAAGAATTAATCTGACTGCAAACCGTTTGATGGGAAGAACTCTCACCG
TTGAAGTGTCAAGTAAACAATTAGAAACCCCGCAGCAAGAATCCCTAAAGCATGCCACAAGGATTAT
TGATGAGGTGGTCAATAAGTTTCTGGATGATTTGGGAAATGCCAAGAGTCATTTAATGTCGCTCTACAGT
GCATGTTTCACTGAGGTGCCACATGGGCCAGTTGATCAGAAGTTTCAATCCATAGTAATTGGCTGTGCTC
TTGAAGATCAGAAGAAAATTAAGAGAAGATTAGAGACTCTGCTTAGAAAATATTGAAAACCTGACAAGGC
CATCAAGCTATTAGAGCATTCTAAAGGAGCTGGTTCCAAAACCTGCAACAAAATGCTGAAAGCAGATTC
AAT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220122 protein sequence
 Red=Cloning site Green=Tags(s)

MAQAKINAKANEGRFCRSSMADRSSRLLESLDQLELRVEALREAAATAVEQEKEILLEMIHSIQNSQDMR
 QISDGEREELNLTANRLMGRRTLVEVSVETIRNPQQQESLKHATRIIDEVVNKFLLDDLGNKSHLMSLYS
 ACSSEVPHGPVDQKFQSIIVIGCALEDQKKIKRRLTLLRNIENSDKAIKILLEHSGAGSKTLQQNAESRF
 N

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6442_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004282

ORF Size: 633 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_004282.4](#)

RefSeq Size: 2068 bp

RefSeq ORF: 636 bp

Locus ID: 9532

UniProt ID: [O95816](#)

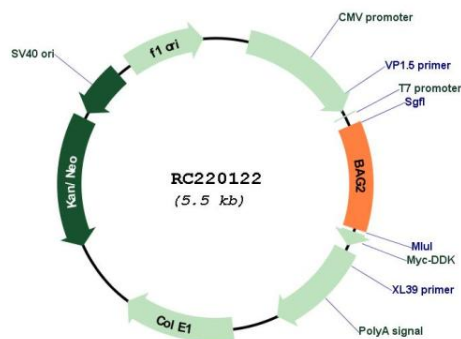
Cytogenetics: 6p12.1

Protein Families: Druggable Genome

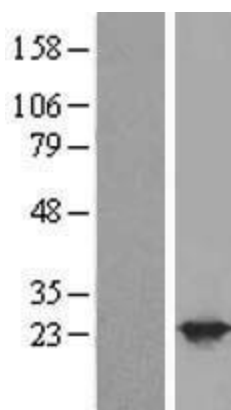
MW: 23.8 kDa

Gene Summary: BAG proteins compete with Hip for binding to the Hsc70/Hsp70 ATPase domain and promote substrate release. All the BAG proteins have an approximately 45-amino acid BAG domain near the C terminus but differ markedly in their N-terminal regions. The predicted BAG2 protein contains 211 amino acids. The BAG domains of BAG1, BAG2, and BAG3 interact specifically with the Hsc70 ATPase domain in vitro and in mammalian cells. All 3 proteins bind with high affinity to the ATPase domain of Hsc70 and inhibit its chaperone activity in a Hip-repressible manner. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220122



Western blot validation of overexpression lysate (Cat# [LY418098]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220122 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).