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Product datasheet for RC206186

RYBP (NM_012234) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RYBP (NM_012234) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RYBP
Synonyms:	AAP1; APAP-1; DEDAF; YEAF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206186 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCATGGGCGACAAGAAGAGCCCGACCAGGCCAAAAAGACAAGCGAAACCTGCCACAGACGAAGGGT
TTTGGGATTGTAGCGTCTGCACCTTCAGAAACAGTGCTGAAGCCTTTAAATGCAGCATCTGCGATGTGAG
GAAAGGCACCTCCACCAGAAAACCTCGGATCAATTCTCAGCTGGTGGCACAACAAGTGGCACAACAGTAT
GCCACCCCACCACCCCCTAAAAAGGAGAAGAAGGAGAAAGTTGAAAAGCAGGACAAAGAGAAACCTGAGA
AAGACAAGGAAATTAGTCCTAGTGTTACCAAGAAAAATACCAACAAGAAAACCAAACCAAAGTCTGACAT
TCTGAAAGATCCTCCTAGTGAAGCAAACAGCATACAGTCTGCAAATGCTACAACAAAGACCAGCGAAACA
AATCACACCTCAAGGCCCCGGCTGAAAAACGTGGACAGGAGCACTGCACAGCAGTTGGCAGTAACTGTGG
GCAACGTCACCGTCATTATCACAGACTTTAAGGAAAAGACTCGCTCCTCATCGACATCCTCATCCACAGT
GACCTCCAGTGCAGGGTCAGAACAGCAGAACCAGAGCAGCTCGGGGTCAGAGAGCACAGACAAGGGCTCC
TCCCGTTCCTCCACGCCAAAGGGCGACATGTCAGCAGTCAATGATGAATCTTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC206186 protein sequence
Red=Cloning site Green=Tags(s)

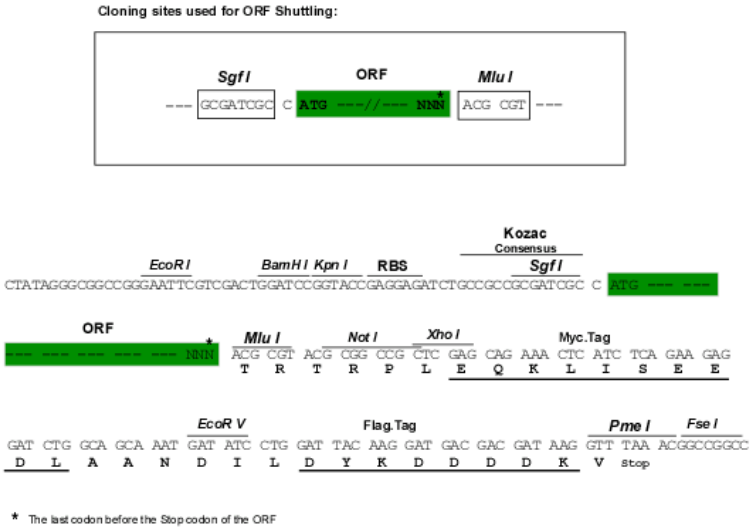
MTMGDKKSPTRPKRQAKPATDEGFWDCSVCTFRNSAEAFKCSICDVRKGTSTRKPRINSQLVAQQVAQQY
ATPPPPKKEKKEKVEKQDKEKPEKDKEISPSVTKKNTNKKTKPKSDILKDPPSEANSIQSANATTKTSET
NHTSRPRLKNVDRSTAQQLAVTVGNVTVIITDFKEKTRSSSTSSSTVTSSAGSEQQNQSSSGSESTDKGS
SRSSTPKGDMSAVNDESF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6072_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012234

ORF Size: 684 bp

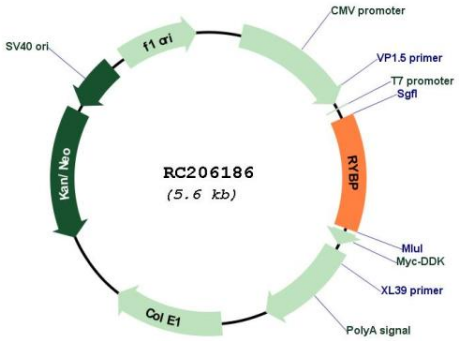
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

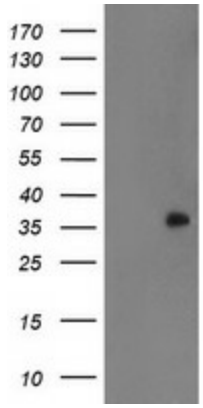
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_012234.3, NP_036366.2
RefSeq Size:	4678 bp
RefSeq ORF:	687 bp
Locus ID:	23429
UniProt ID:	Q8N488
Cytogenetics:	3p13
Domains:	zf-RanBP
Protein Families:	Druggable Genome, Transcription Factors
MW:	24.9 kDa
Gene Summary:	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1-like complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:25519132). Component of a PRC1-like complex that mediates monoubiquitination of histone H2A 'Lys-119' on the X chromosome and is required for normal silencing of one copy of the X chromosome in XX females. May stimulate ubiquitination of histone H2A 'Lys-119' by recruiting the complex to target sites (By similarity). Inhibits ubiquitination and subsequent degradation of TP53, and thereby plays a role in regulating transcription of TP53 target genes (PubMed:19098711). May also regulate the ubiquitin-mediated proteasomal degradation of other proteins like FANK1 to regulate apoptosis (PubMed:14765135, PubMed:27060496). May be implicated in the regulation of the transcription as a repressor of the transcriptional activity of E4TF1 (PubMed:11953439). May bind to DNA (By similarity). May play a role in the repression of tumor growth and metastasis in breast cancer by down-regulating SRRM3 (PubMed:27748911).[UniProtKB/Swiss-Prot Function]

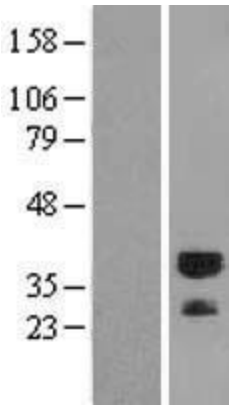
Product images:



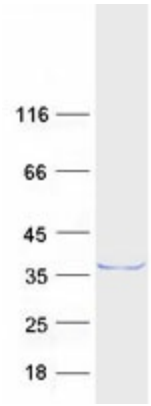
Circular map for RC206186



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RYBP (Cat# RC206186, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RYBP(Cat# [TA504650]). Positive lysates [LY415887] (100ug) and [LC415887] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415887]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206186 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RYBP protein (Cat# [TP306186]). The protein was produced from HEK293T cells transfected with RYBP cDNA clone (Cat# RC206186) using MegaTran 2.0 (Cat# [TT210002]).