

## Product datasheet for **SC109359**

### Integrin beta 4 binding protein (EIF6) (NM\_002212) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 4 binding protein (EIF6) (NM_002212) Human Untagged Clone
Tag:	Tag Free
Symbol:	Integrin beta 4 binding protein
Synonyms:	b(2)gcn; CAB; eIF-6; EIF3A; ITGB4BP; p27(BBP); p27BBP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109359 sequence for NM_002212 edited (data generated by NextGen Sequencing)

```
ATGGCGTCCGAGCTTCGTTTCGAGAACAACACTGTGAGATCGGCTGCTTTGCCAAGCTCACC
AACACCTACTGTCTGGTAGCGATCGGAGGCTCAGAGAACTTCTACAGTGTGTTTCGAGGGC
GAGCTCTCCGATACCATCCCCGTGGTGCACGCTCTATCGCCGGCTGCCGCATCATCGGG
CGCATGTGTGTGGGGAACAGGCACGGTCTCCTGGTACCCAACAATACCACCGACCAGGAG
CTGCAACACATTCGCAACAGCCTCCCAGACACAGTGCAGATTAGGCGGGTGGAGGAGCGG
CTCTCAGCCTTGGGCAATGTCACCACCTGCAATGACTACGTGGCCTTGGTCCACCCAGAC
TTGGACAGGGAGACAGAAGAAATCTGGCAGATGTGCTCAAGGTGGAAGTCTTCAGACAG
ACAGTGGCCGACCAGGTGCTAGTAGGAAGCTACTGTGTCTTCAGCAATCAGGGAGGGCTG
GTGCATCCAAGACTTCAATTGAAGACCAGGATGAGCTGCTCTTCTTCAAGTCCCC
CTTGTGGCGGGGACTGTGAACCGAGGCAGTGAGGTGATTGCTGCTGGGATGGTGGTGAAT
GACTGGTGTGCCTTCTGTGGCCTGGACACAACCCAGCACAGAGCTGTCAAGTGGTGGAGAGT
GTCTTCAAGCTGAATGAAGCCCAGCCTAGCACCATTGCCACCAGCATGCGGGATTCCCTC
ATTGACAGCCTCACCTGA
```

Clone variation with respect to NM\_002212.2



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002212 unedited  
 ACTATTTTGAATACGACTCACTATAGGGCGGCCGCAATTCGCGCAGGGGAGCTTGTTA  
 CTGGTTACTTGGCCTCATGGCGGTCCGAGCTTCGTTTCGAGAACAACCTGTGAGATCGGCTG  
 CTTTGCCAAGCTCACCAACACCTACTGTCTGGTAGCGATCGGAGGCTCAGAGAATTCTA  
 CAGTGTGTTTCAGGGCGAGCTCTCCGATACCATCCCCGTGGTGCACGCGTCTATCGCCGG  
 CTGCCGCATCATCGGGCGCATGTGTGTGGGGAACAGGCACGGTCTCCTGGTACCCAACAA  
 TACCACCGACCAGGAGCTGCAACACATTGCAACAGCCTCCAGACACAGTGCAGATTAG  
 GCGGGTGGAGGAGCGGCTCTCAGCCTTGGGCAATGTCACCACCTGCAATGACTACGTGGC  
 CTTGGTCCACCCAGACTTGGACAGGGAGACAGAAGAAATTTCTGGCAGATGTGCTCAAGGT  
 GGAAGTCTTCAGACAGACAGTGGCCGACCAGGTGCTAGTAGGAAGCTACTGTGTCTTCAG  
 CAATCAGGGAGGGCTGGTGCATCCCAAGACTTCAATTGAAGACCAGGATGAGCTGTCTC  
 TCTTCTCAAGTCCCCTTGTGGCGGGACTGTGAACCGAGGCAGTGAGGTGATTGCTGC  
 TGGGATGGTGGTGAATGACTGGTGTGCCTTCTGTGGCCTGGACACACCCAGCACAGAGCT  
 GTCAGTGGTGGAGAGTGTCTTCAAGCTGAATGAAGCCCAACCTAGCACCATTTGCCACCAG  
 CATGCGGGATTCCCTCATTGACAGCCTTCCCTGAGTACCTTTTCCAAGTTGTTCCATGGG  
 CCTCCTGGCTTCTGGACTGTGGCAACCTTTCTCCACATTCGCCCATCTGTACCNATG  
 CTGTCAGGAAGGTGGCAGAAAGCCACCTGGACTGAGGGGCTGGCACCCACCTTTCC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002212 unedited  
 NCCCTTAGCTCTGGACCGCGGCCGCATNCTAGGATCGAGTTTTTTTTTTTTTTTTTTTGC  
 CCGNAGGAACACTGCACTTTAATGGGGTGGCACAGGACAGCAGAACCCTCAGCCAGCAGCC  
 ACAGGGCCTGCCAGCCAGCACAAACAGAGCAGGTTTTTGCAGTAATGATAGATCCAGGCGA  
 TAAGCACAGGTGAAAAGGGTTGGGTGCCAGCCCTCAGTCCCAGTGAAGTCTCTGCCA  
 CCTCCCTGCCAGCATCCGGTACAGATTGGCGGAATGTGGAGAAGTTGGCCACAGTCCA  
 GAGCCAGGAGCCATGGAACAACCTTGAAGGTGACTCAGGTGAGGCTGTCAATGAGGGAA  
 TCCCGCATGCTGGTGGCAATGGTGTAGGCTGGGCTTCATTGAGCTTGAAGACACTCTCC  
 ACCACTGACAGCTCTGTGCTGGTGTGTCCAGGCCACAGAAGGCACACCAGTCATTACCC  
 ACCATCCCAGCAGCAATCACCTCACTGCCTCGGTTACAGTCCCCGCCACAAGGGGGACT  
 TGAAGAAGAGAGGACAGCTCATCTGGTCTTCAATTGAAGTCTTGGGATGCACCAGCCCT  
 CCCTGATTGCTGAAGACACAGTAGCTTCTACTAGCACCTGGTCGGCCACTGTCTGTCTG  
 AAGACTTCCACCTTGAGCACATCTGCCAGAATTTCTTCTGTCTCCCTGTCCAAGTCTGGG  
 TGGACCAAGGCCACGTAGTCATTGCAGGTGGTGACATTGCCAAGGCTGAGAGCCGCTCC  
 TCCACCGCTATCTGCCTGTGTCTGGGAGGCTGTGCAATGTGNTGCAGCTCCTGGTCG  
 GCGGTATTTGGTGGTACCAGNAGACCGTGCCTGTTCCCCACACACATGCGCCCCGAGAT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002212

**Insert Size:**

1000 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](mailto: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.

**RefSeq:** [NM\\_002212.2](#), [NP\\_002203.1](#)

**RefSeq Size:** 1114 bp

**RefSeq ORF:** 738 bp

**Locus ID:** 3692

**UniProt ID:** [P56537](#)

**Cytogenetics:** 20q11.22

**Domains:** eIF6

**Protein Families:** Druggable Genome

**Gene Summary:**

Hemidesmosomes are structures which link the basal lamina to the intermediate filament cytoskeleton. An important functional component of hemidesmosomes is the integrin beta-4 subunit (ITGB4), a protein containing two fibronectin type III domains. The protein encoded by this gene binds to the fibronectin type III domains of ITGB4 and may help link ITGB4 to the intermediate filament cytoskeleton. The encoded protein, which is insoluble and found both in the nucleus and in the cytoplasm, can function as a translation initiation factor and prevent the association of the 40S and 60S ribosomal subunits. Multiple non-protein coding transcript variants and variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jun 2012]

Transcript Variant: This variant (1) encodes the longer isoform (a). Variants 1, 2, and 6 all encode isoform a.