

Product datasheet for **RG223461**

GBX2 (NM_001485) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GBX2
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PSI00010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG223461 representing NM_001485
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGAGCGCAGCGTTCGCCGTCGCTGATGATGATGCAGCGCCGCTGGGAGTAGCACCGCCTTCAGCA
TAGACTCGCTGATCGGCAGCCCGCCGAGCCAGCCCGGCCATTTCTGTCTACACCGCTACCCCATGTT
CATGCCCTACCGGCCGGTAGTGCTGCCGCCGCCGCCGCCGCCGCCGCCGCTGCCACAGCGCGCTG
CAGCCAGCGCTGCCGCCGCACACCTCACCACAGATCCCGAGCTGCCACAGGCTTCTGCTCCAGCC
TGGCGCAGGGCATGGCGCTCACCTCTACGCTCATGGCCAGCTCCCGCGCGCTTCTCCGCTCGCCCA
GCACCAGGAGGCGCAGCGCCCGCAAGTTCGCGCCGACCGCTGCCCGCGCGGTAACCTCGACAAG
GCGGAGGCGCTGCAGGCTGACGCGGAGGACGGCAAGGCTTCTGGCCAAAGAGGGCTCGCTGCTCGCT
TCTCCGCGCCGAGACGGTGCAGGCTTCTGCTCGTGGGCTGTCCGAGGCAAGGAAAGACGAGTCAAA
GGTGAAGACGACCCGAAGGGCAAGGAGGAGCTTCTGCTGGAGAGCGATGTGACTACAGCTCGGAT
GACAATCTGACTGGCCAGGCAGCTCACAAGGAGGAAGACCCGGGCCACGCGCTGGAGGAGACCCCGCA
GCAGCGCGCGCGGGCAGCACACGCTCTACGGCAAGAACCAGCGCGCGGACTGCCTTACCAGCGA
GCAGCTGCTGGAGCTAGAGAAGGAGTTCCACTGCAAAAAGTACCTCTCTTGACCGAGCGCTCGCAGATC
GCCCACGCCCTCAAACCTCAGCGAGGTGCAGGTGAAAATCTGGTTCCAGAACCGAGCGGCCAAGTGAAAC
GGTGAAGGCAGGCAATGCCAATCCAAGACAGGGAGCCCTCCCGGAACCCTAAGATCGTCTCCCAT
CCCTGTCCACGTACGAGGTTCTGCTATCAGAAGTCAGCATCAGCAGCTAGAACAGGCCCGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG223461 representing NM_001485
Red=Cloning site Green=Tags(s)

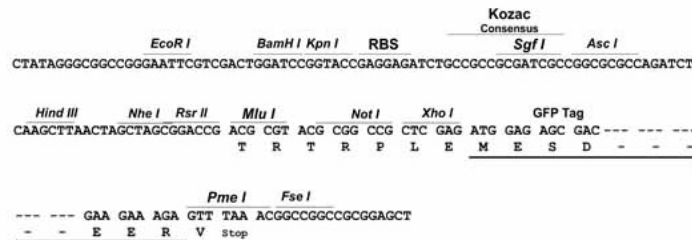
MSAAFPSSLMMQRPLGSSTAFSIDSLIGSPQPSPGHFVYTGYPMPYRPVLPPLPPPPPPALPQAAL
QPALPPAHPHHQIPSLPTGFCSSLAQGMALTSTLMATLPGGFSASPQHQEAAAARKFAPQLPGGGNFDK
AEALQADAEDGKGLAKEGSLLAFAAETVQASLVGAVRGQKDESKVEDDPKGKEESF SLESVDYSSD
DNL TGQAAHKEEDPGHALEETPPSSGAAGSTTSTGKNRRRTAFTSEQLLELEKEFHCKKYLSTERSQI
AHALKLSEVQYKIWFQNRRAKWKRVKAGNANSKTGEP SRNPKIVVPIPVHVS RFAIRS QHQQLEQARP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001485

ORF Size: 1044 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_001485.4](#)

RefSeq Size: 1335 bp

RefSeq ORF: 1047 bp

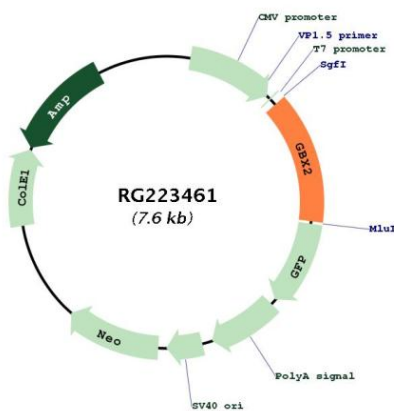
Locus ID: 2637

UniProt ID: [P52951](#)

Cytogenetics: 2q37.2

Gene Summary: May act as a transcription factor for cell pluripotency and differentiation in the embryo. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG223461