OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG211029

Epas1 (BC057870) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Epas1 (BC057870) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Epas1
Synonyms:	HLF, MOP2, HIF-2alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG211029 representing BC057870
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACAGCTGACAAGGAGAAAAAAAGGAGCAGCTCAGAGCTGAGGAAGGAGAAATCCCGTGATGCCGCGA
GGTGCCGGCGCAGCAAGGAGACGGAGGTCTTCTATGAGTTGGCTCATGAGTTGCCCCTGCCTCACAGTGT
GAGCTCCCACCTGGACAAAGCCTCCATCATGCGCCTGGCCATCAGCTTCCTTCGGACACATAAGCTCCTG
TCCTCAGTCTGCTCTGAAAATGAATCTGAAGCTGAGGCCGACCAGCAAATGGATAACTTGTACCTGAAAG
CCTTGGAGGGTTTCATTGCTGTGGTGACCCAAGACGGTGACATGATCTTTCTGTCGGAAAACATCAGCAA
GTTCATGGGACTTACCCAGGTAGAACTAACAGGACACAGCATCTTTGACTTCACTCATCCTTGCGACCAT
GAGGAGATCCGTGAGAACCTGACTCTCAAAAACGGCTCTGGTTTTGGGAAGAAGAGCAAAGACGTGTCCA
CCGAGCGTGACTTCTTCATGAGGATGAAGTGCACAGTCACCAACAGAGGCCGGACTGTCAACCTCAAGTC
GGCCACCTGGAAGGTCCTGCACTGCACCGGGCAAGTGAGAGTCTACAACAACTGCCCCCCTCACAGTAGC
CTCTGTGGCTCCAAGGAGCCCCTGCTGTCCTGCCTTATCATCATGTGTGAGCCAATCCAGCACCCATCCC
ACATGGACATCCCCCTGGACAGCAAGACTTTCCTGAGCCGCCACAGCATGGACATGAAGTTCACCTACTG
TGACGACAGAATCTTGGAACTGATTGGTTACCACCCCGAGGAGCTACTTGGACGCTCTGCCTATGAGTTC
TACCATGCCCTGGATTCGGAGAACATGACCAAAAGTCACCAGAACTTGTGCACCAAGGGGCAGGTGGTAT
CTGGCCAGTACCGGATGCTAGCCAAACACGGAGGATATGTGTGGCTGGAGACCCAGGGGACGGTCATCTA
CAACCCCCGCAACCTGCAGCCTCAGTGTATCATGTGTGTCAACTATGTGCTGAGTGAGATCGAGAAGAAC
GACGTGGTGTTCTCCATGGACCAGACCGAATCCCTGTTCAAGCCACACCTGATGGCCATGAACAGCATCT
TTGACAGCAGTGACGATGTGGCTGTAACTGAGAAGAGCAACTACCTGTTCACCAAACTGAAGGAGGAGCC
CGAGGAACTGGCCCAGTTGGCCCCCACCCCAGGAGATGCCATTATTTCTCTCGATTTCGGAAGCCAGAAC
TTCGATGAACCCTCAGCCTATGGCAAGGCCATCCTTCCCCCGGGCCAGCCATGGGCCGCGGGGCTGAGGA
GCCACAGTGCCCAGAGCGAGTCCGGGAGCCTGCCAGCCTTCACTGTGCCCCAGGCAGGCACCCCAGGGAA
CACTACACCCAGTGCTTCAAGCAGCAGTAGCTGCTCCACGCCCAGCAGCCCTGAGGACTACTATTCATCC
TTGGAGAATCCCTTGAAGATCGAAGTGATTGAGAAGCTTTTCGCCATGGACACGGAGCCGAGGGACCCGG
GCAGTACCCAGACGGACTTCAGTGAACTGGATTTGGAGACCTTGGCACCCTACATCCCTATGGACGGCGA
GGACTTCCAGCTGAGCCCCATCTGCCCAGAGGAGCCGCTCATGCCAGAGAGCCCCCAGCCCACCCCCCAG
CACTGCTTCAGTACCATGACCAGCATCTTCCAGCCGCTCACCCCGGGGGCCACCCACGGCCCCTTCTTCC
TCGATAAGTACCCGCAGCAGTTGGAAAGCAGGAAGACAGAGTCTGAGCACTGGCCCATGTCTTCCATCTT
CTTTGATGCTGGGAGCAAAGGGTCCCTGTCTCCATGCTGTGGCCAGGCCAGCACCCCTCTCTCTTCTATG
GGGGGCAGATCCAACACGCAGTGGCCCCCGGATCCACCATTACATTTCGGCCCTACTAAGTGGCCTGTGG
GTGATCAGAGTGCTGAATCCCTGGGAGCCCTGCCGGTGGGGTCATCGCAGTTGGAACCTCCGAGCGCCCC
GCCTCATGTCTCCATGTTCAAGATGAGGTCTGCAAAGGACTTCGGGGCCCGAGGTCCATACATGATGAGC
CCAGCCATGATCGCCCTGTCCAACAAGCTGAAGCTAAAGCGGCAGCTGGAGTATGAGGAGCAAGCCTTCC
AAGACACAAGCGGGGGGGACCCTCCAGGCACCAGCAGTTCACACTTGATGTGGAAACGTATGAAGAGCCT
CATGGGCGGGACCTGTCCTTTGATGCCTGACAAGACCATCAGTGCGAACATGGCCCCCGATGAATTCACC
CAAAAATCTATGAGAGGCCTGGGCCAGCCACTGAGACACCTGCCACCTCCCCAGCCACCATCTACCAGGA
ACTCAGGGGAGAACGCCAAGACTGGGTTCCCGCCACAGTGCTATGCCTCCCAGTTCCAGGACTACGGTCC
TCCAGGAGCTCAAAAGGTGTCAGGCGTGGCCAGTCGACTGCTGGGGCCATCGTTCGAGCCTTACCTGTTG
CCGGAACTGACCAGATATGACTGTGAGGTGAACGTGCCCGTGCCTGGAAGCTCCACACTCCTGCAGGGGA
GAGACCTTCTCAGAGCTCTGGACCAGGCCACC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

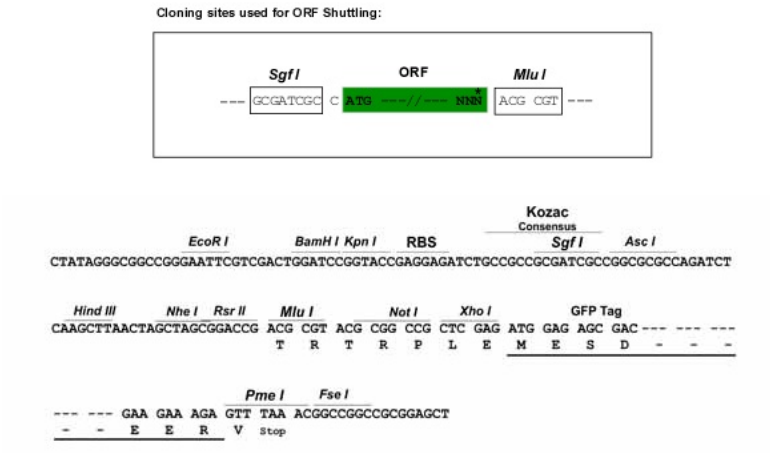
>MG211029 representing BC057870
Red=Cloning site Green=Tags(s)

MTADKEKKRSSSELRKEKSRDAARCRRSKETEVFYELAHELPLPHSVSSHLDKASIMRLAISFLRTHKLL
SSVCSENESEAEADQQMDNLYLKALEGFIAVVTQDGDMIFLSENISKFMGLTQVELTGHSIFDFTHPCDH
EEIRENLTLKNGSGFGKKSKDVSTERDFFMRMKCTVTNRGRTVNLKSATWKVLHCTGQVRVYNNCPPHSS
LCGSKEPLLSCLIIMCEPIQHPSHMDIPLDSKTFLSRHSMDMKFTYCDDRILELIGYHPEELLGRSAYEF
YHALDSENMTKSHQNLCTKGQVVSGQYRMLAKHGGYVWLETQGTVIYNPRNLQPQCIMCVNYVLSEIEKN
DVVFSMDQTESLFKPHLMAMNSIFDSSDDVAVTEKSNYLFTKLKEEPEELAQLAPTPGDAIISLDFGSQN
FDEPSAYGKAILPPGQPWAAGLRSHSAQSESGSLPAFTVPQAGTPGNTTPSASSSSSCSTPSSPEDYYSS
LENPLKIEVIEKLFAMDTEPRDPGSTQTDFSELDLETLAPYIPMDGEDFQLSPICPEEPLMPESPQPTPQ
HCFSTMTSIFQPLTPGATHGPFFLDKYPQQLESRKTESEHWPMSSIFFDAGSKGSLSPCCGQASTPLSSM
GGRSNTQWPPDPPLHFGPTKWPVGDQSAESLGALPVGSSQLEPPSAPPHVSMFKMRSAKDFGARGPYMMS
PAMIALSNKLKLKRQLEYEEQAFQDTSGGDPPGTSSSHLMWKRMKSLMGGTCPLMPDKTISANMAPDEFT
QKSMRGLGQPLRHLPPPQPPSTRNSGENAKTGFPPQCYASQFQDYGPPGAQKVSGVASRLLGPSFEPYLL
PELTRYDCEVNVPVPGSSTLLQGRDLLRALDQAT

TRTRPLE - GFP Tag - V

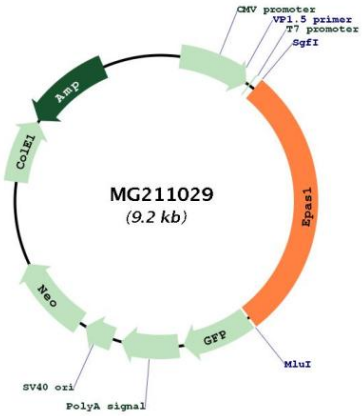
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	BC057870
ORF Size:	2622 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:	BC057870, AAH57870
RefSeq Size:	2998 bp
RefSeq ORF:	2624 bp
Locus ID:	13819
Cytogenetics:	17 E4
Gene Summary:	Transcription factor involved in the induction of oxygen regulated genes. Heterodimerizes with ARNT; heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (PubMed:26245371). Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation requires recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG211029