

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 RC209954L2

ErbB 3 (ERBB3) (NM_001982) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ErbB 3 (ERBB3) (NM_001982) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	ErbB 3
Synonyms:	c-erbB-3; c-erbB3; ErbB-3; erbB3-S; FERLK; HER3; LCCS2; MDA-BF-1; p45-sErbB3; p85-sErbB3; p180-ErbB3
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC209954).
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling:

 Sgf I
 ORF
 Miu I

 ··· GCG ATC GC
 ATG ··· // ··· NNN
 ACG CGT ···

			Kozak Consensus	
EcoR I	BamH I	RBS	Sgf I	ORF
CTATAGGGCGGCCGGGAATTCGTC	GACTGGATCCG	GTACCGAGGAGATCTG	CCGCCGCGATCGC C A	TG
	Mlu I	Notl_Xhol	mGFP Tag	
NNŇ	ACG CGT ACG T R T	G CGG CCG CTC GAG R P L E	ATG AGC GGG GGC M S G G	<u> </u>
GGA CTC AGA TAA GTT G L R Stop	Pmel TAA ACGGCC	GGCCGCGG		

* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM_001982 4026 bp



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

	bB 3 (ERBB3) (NM_001982) Human Tagged Lenti ORF Clone – RC209954L2	
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 <u>custsupport@origene.com</u> 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. <u>More info</u>	
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 Met	 hod: 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:	<u>NM 001982.2</u>	
RefSeq Size:	5511 bp	
RefSeq ORF:	4029 bp	
Locus ID:	2065	
UniProt ID:	<u>P21860</u>	
Cytogenetics:	12q13.2	
Domains:	Recep_L_domain, pkinase, TyrKc, S_TKc, Furin-like, FU	
Protein Families:	Families: Adult stem cells, Druggable Genome, Protein Kinase, Secreted Protein, Stem cell - Pluripotency, Transmembrane	
Protein Pathways:	Calcium signaling pathway, Endocytosis, ErbB signaling pathway	
MW:	148.1 kDa	

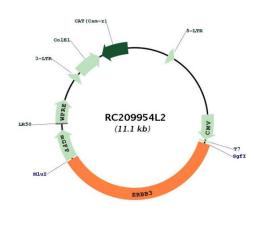
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

CRIGENE ErbB 3 (ERBB3) (NM_001982) Human Tagged Lenti ORF Clone – RC209954L2

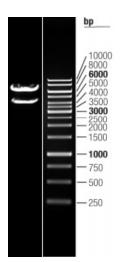
Gene Summary:

This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC209954L2



Double digestion of RC209954L2 using Sgfl and Mlul

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US