

## Product datasheet for **RG210411**

### Ephrin A5 (EFNA5) (NM\_001962) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ephrin A5 (EFNA5) (NM_001962) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ephrin A5
Synonyms:	AF1; EFL5; EPLG7; GLC1M; LERK7; RAGS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210411 representing NM_001962 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTGCACGTGGAGATGTTGACGCTGGTGTCTGGTCTGGATGTGTGTTCAGCCAGGACCCGG  
GCTCCAAGGCCGTCGCCGACCGCTACGCTGTCTACTGGAACAGCAGCAACCCAGATTCCAGAGGGGTGA  
CTACCATATTGATGTCTGTATCAATGACTACCTGGATGTTTTCTGCCCTCACTATGAGGACTCCGCCCCA  
GAAGATAAGACTGAGCGCTATGCCTCTACATGGTGAACTTTGATGGCTACAGTGCCTGCGACCACACTT  
CCAAAGGGTTCAAGAGATGGGAATGTAACCGCCCTCACTCTCAAATGGACCGCTGAAGTTCTCTGAAAA  
ATTCCAGCTCTTCACTCCCTTTCTCTAGGATTTGAATTCAGGCCAGGCCGAGAATATTTCTACATCTCC  
TCTGCAATCCCAGATAATGGAAGAAGGTCTGTCTAAAGCTCAAAGTCTTTGTGAGACCAACAAATAGCT  
GTATGAAAATATAGGTGTTTATGATCGTGTTCATGATGTTTTCGATGTTAACGACAAAGTAGAAAATTCATTAGAACC  
AGCAGATGACACCGTACATGAGTCAGCCGAGCCATCCCGCGGCGAGAACGCGGCACAAACACCAAGGATA  
CCAGCCGCTTTTGGCAATCCTACTGTTCTCTGCGATGCTTTTGACATTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG210411 representing NM\_001962  
Red=Cloning site Green=Tags(s)

MLHVEMLTLVFLVLMCVFSQDPGSKAVADRYAVYWSSNPRFQRGDYHIDVCINDYLDVFCPHYEDSVP  
 EDKTERYVLYMVNFDGYSACDHTSKGFKRWECNRPHSPNGPLKFSEKQLFTPFSLGFEFRPGREYFYIS  
 SAIPDNGRRSCLKLVFVRPTNSCMKTIQVHDRVFDVNDKVENSLPADDTVHESAEP SRGENAAQTPRI  
 PSRLLAILLFLLAMLLTL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001962

**ORF Size:** 684 bp

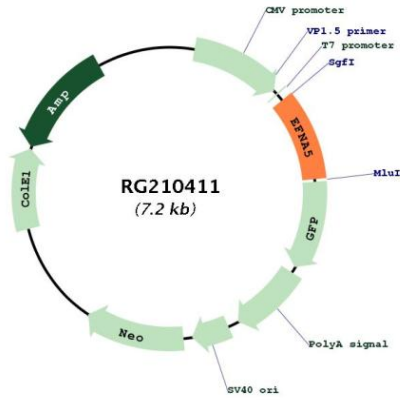
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001962.3</a>
<b>RefSeq Size:</b>	1574 bp
<b>RefSeq ORF:</b>	687 bp
<b>Locus ID:</b>	1946
<b>UniProt ID:</b>	<a href="#">P52803</a>
<b>Cytogenetics:</b>	5q21.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Axon guidance
<b>Gene Summary:</b>	<p>Ephrin-A5, a member of the ephrin gene family, prevents axon bundling in cocultures of cortical neurons with astrocytes, a model of late stage nervous system development and differentiation. The EPH and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, particularly in the nervous system. EPH receptors typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin ligands and receptors have been named by the Eph Nomenclature Committee (1997). Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. The Eph family of receptors are similarly divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG210411