

## Product datasheet for **RG220326**

### Eph receptor A3 (EPHA3) (NM\_182644) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A3 (EPHA3) (NM_182644) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Eph receptor A3
Synonyms:	EK4; ETK; ETK1; HEK; HEK4; TYRO4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG220326 representing NM\_182644  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATTGTCAGCTCTCCATCCTCCTCTCAGCTGCTCTGTTCTCGACAGCTTCGGGAACTGATTC  
 CGCAGCCTTCCAATGAAGTCAATCTACTGGATTCAAAAACAATCAAGGGGAGCTGGGCTGGATCTCTTA  
 TCCATCACATGGGTGGGAAGAGATCAGTGGTGTGGATGAACATTACACACCCATCAGGACTTACCAGGTG  
 TGCAATGTCATGGACCACAGTCAAAAACAATTGGCTGAGAACAACCTGGTCCCCAGGAACTCAGCTCAGA  
 AGATTTATGTGGAGCTCAAGTTCCTCTACGAGACTGCAATAGCATTCCATTGGTTTTAGGAACTTGCAA  
 GGAGACATTCAACCTGTACTACATGGAGTCTGATGATGATCATGGGGTGAATTTTCGAGAGCATCAGTTT  
 ACAAAGATTGACACCATTGCAGCTGATGAAAGTTTCACTCAAATGGATCTTGGGGACCGTATTCTGAAGC  
 TCAACACTGAGATTAGAGAAGTAGGTCTGTCAACAAGAAGGGATTTTATTTGGCATTTCAGATGTTGG  
 TGCTTGTGTTGCCTTGGTGTCTGTGAGAGTATACTTCAAAAAGTCCCATTACAGTGAAGAATCTGGCT  
 ATGTTTCCAGACACGGTACCCATGGACTCCCAGTCCCTGGTGGAGTTAGAGGGTCTTGTGTCAACAATT  
 CTAAAGGAGGAAGATCCTCCAAGGATGACTGCAGTACAGAAGGCGAATGGCTTGTACCCATTGGCAAGTG  
 TTCTGCAATGCTGGCTATGAAGAAAGAGGTTTTATGTGCCAAGCTTGTGCGACAGGTTTCTACAAGGCA  
 TTGGATGGTAATATGAAGTGTGCTAAGTGCCCGCTCACAGTTCTACTCAGGAAGATGGTTCAATGAACT  
 GCAGGTGTGAGAAATAACTTCCGGGCAGACAAAAGCCCTCCATCCATGGCTTGTACCCGACCTCCATC  
 TTCACCAAGAAATGTTATCTCTAATAATAACGAGACCTCAGTTATCCTGGACTGGAGTTGGCCCCGGAC  
 ACAGGAGGCCGGAAGATGTTACCTTCAACATCATATGAAAAATGTGGGTGGAATATAAACAGTGTG  
 AGCCATGCAGCCCAAATGTCGGCTTCCCTCCCTCGACAGTTTGGACTCACCAACACCAGGTGACAGTGAC  
 AGACCTTCTGGCACATACTAATACTACACCTTTGAGATTGATGCCGTTAATGGGGTGTGAGAGCTGAGCTCC  
 CCACCAAGACAGTTTGTGCGGTGAGCATCACAATAATCAGGCTGCTCCATCACCTGCTCTGACGATTA  
 AGAAAGATCGGACCTCCAGAAATAGCATCTCTTTGCTGCGCAAGAACCTGAACATCCTAATGGGATCAT  
 ATTGGACTACGAGGTCAAATACTATGAAAAGCAGGAACAAGAAACAAGTTATACCATTCTGAGGGCAAGA  
 GGCACAAATGTTACCATCAGTAGCCTCAAGCCTGACACTATATACGTATTCCAAATCCGAGCCCGAACAG  
 CCGCTGGATATGGGACGAACAGCCGAAGTTTGTGTTGAACTAGTCCAGACTGTATGTATTATTTCAA  
 TGCAGTC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG220326 representing NM\_182644  
 Red=Cloning site Green=Tags(s)

MDCQLSILLLLSCSVLDSFGELIPQPSNEVNLDSKTIQGELGWISYPSHGWEIISGVDEHYTPIRTYQV  
 CNVMDHSQNNWLRTNWVPRNSAQKIYVELKFTLRDCNSIPLVLGTCKETFNLYYMESDDDHGVKFRHQF  
 TKIDTIAADESFTQMDLGDRILKLNTEIREVGPVNKKGFLAFQDVGACVALVSVRVYFKKCPFTVKNLA  
 MFPDTPMDSQSLVEVRGSCVNNSKEEDPPRMYCSTEGEWLVPIGKCSNAGYEERGFMCQACRPGFYKA  
 LDGNMCKAKPPHSSTQEDGSMNRCENNYFRADKDPSSMACTRPPSSPRNVISINETSVIDLWSWPLD  
 TGGRKDVTFNIIICKKCGWNIKQCEPCSPNVRFLPRQFGLTNTTIVTDLAHTNYTFEIDAVNGVSELSS  
 PPRQFAAVSITTNQAAPSPVLTIKKDRTSRNSISLSWQEPEHPNGIILDYEVKYYEKQEETSITILRAR  
 GTNVTISSLKPDTIYVFQIRARTAAGYGTNSRKFEFETSPDCMYFNAV

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_182644

**ORF Size:** 1617 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:** [NM\\_182644.3](#)

**RefSeq Size:** 2546 bp

**RefSeq ORF:** 1620 bp

**Locus ID:** 2042

**UniProt ID:** [P29320](#)

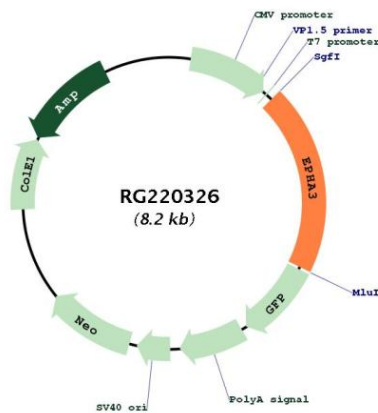
**Cytogenetics:** 3p11.1

**Protein Families:** Druggable Genome, Protein Kinase, Secreted Protein, Transmembrane

**Protein Pathways:** Axon guidance

**Gene Summary:** This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. This gene encodes a protein that binds ephrin-A ligands. Two alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG220326