

## Product datasheet for **RC210390**

### alpha 1 Glycine Receptor (GLRA1) (NM\_000171) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1 Glycine Receptor (GLRA1) (NM_000171) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	alpha 1 Glycine Receptor
Synonyms:	HKPX1; STHE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC210390 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTACAGCTTCAATACTCTTCGACTCTACCTTTGGGAGACCATTGTATTCTTCAGCCTTGCTGCTTCTA  
 AGGAGGCTGAAGCTGCTCGCTCCGACCCAAGCCTATGTCACCCTCGATTTCCTGGATAAGCTAATGGG  
 GAGAACCTCCGGATATGATGCCAGGATCAGGCCAATTTAAAGGTCCCCAGTGAACGTGAGCTGCAAC  
 ATTTTCATCAACAGCTTTGGTTCCATTGCTGAGACAACCATGGACTATAGGGTCAACATCTTCTGCGGC  
 AGCAATGGAACGACCCCCGCTGGCCTATAATGAATACCCTGACGACTCTCTGGACCTGGACCCATCCAT  
 GCTGGACTCCATCGAAACCTGACCTGTTCTTTGCCAACGAGAAGGGGGCCACTTCCATGAGATCACC  
 ACAGACAACAAATTGCTAAGGATCTCCCGAATGGGAATGTCCTCTACAGCATCAGAATCACCTGACAC  
 TGGCCTGCCCCATGGACTGAAGAATTTCCCATGGATGTCCAGACATGTATCATGCAACTGAAAGCTT  
 TGGATATACGATGAATGACCTCATCTTTGAGTGGCAGGAACAGGGAGCCGTGCAGGTAGCAGATGGACTA  
 ACTCTGCCCCAGTTTATCTTGAAGGAAGAGAAGGACTTGAGATACTGCACCAAGCACTACAACACAGGTA  
 AATTCACCTGCATTGAGGCCCGTTCCACCTGGAGCGGCAGATGGGTTACTACCTGATTAGATGTATAT  
 TCCCAGCTGCTCATTGTATCCTCTCATGGATCTCCTTCTGGATCAACATGGATGCTGCACCTGCTCGT  
 GTGGGCCATAGGCATCACCCTGTGCTCACCATGACCACCCAGAGCTCCGGCTCTCGAGCATCTGCCCCA  
 AGGTGTCTATGTGAAAGCCATTGACATTTGGATGGCAGTTTGCCTGCTCTTTGTGTTCTCAGCCCTATT  
 AGAATATGCTGCCGTTAACTTTGTGCTCGGCAACATAAGGAGCTGCTCCGATTCAGGAGGAAGCGGAGA  
 CATCACAAGGAGGATGAAGCTGGAGAAGGCCGCTTAACTTCTCTGCCTATGGGATGGGCCACGCTGTC  
 TACAGGCCAAGGATGGCATCTCAGTCAAGGGCGCCAACAACAGTAACACCAACCCCTCTGTCACC  
 ATCTAAGTCCCCAGAGGAGATGCGAAAACCTTTCATCCAGAGGGCCAAGAAGATCGACAAAATATCCCGC  
 ATTGGCTTCCCCATGGCCTTCTCATTTTCAACATGTTCTACTGGATCATCTACAAGATTGTCCGTAGAG  
 AGGACGTCCACAACCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210390 protein sequence  
 Red=Cloning site Green=Tags(s)

MYSFNTLRLYLWETIVFFSLAASKEAEAARSAPKPMSPSDFLDKLMGRTSGYDARIRPNFKGPPVNVSCN  
 IFINSGSIAETTMDYRVNIFLRQWNPRLAYNEYPDDSLDLPSMLDSIWKPDFFANEKGAHFHEIT  
 TDNKLRLISRNGNVLYSIRITLTLACPMDLKNFPMQVTCIMQLESFGYTMNDLIFEWQEQGAVQVADGL  
 TLPQFILKEEKDLRYCTKHNTGKFTCIARFHLERQMGYYLIQMYIPSLILVILSWISFWINMDAAPAR  
 VLGITTVLMTTQSSGRASLPKVSYYKAIDIWMAVCLLFVFSALLEYAAVNFVSRQHKELLRFRKR  
 HHKEDEAGEGRFNFSAYGMGPAQLQAKDGISVKGANNSNTTNPAPSKSPEEMRKLFIQRAKKIDKISR  
 IGFPMAFLIFNMFYWIYKIVRREDVHNQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6007\\_c01.zip](https://cdn.origene.com/chromatograms/mk6007_c01.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_000171

**ORF Size:** 1347 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\\_000171.4](#)

**RefSeq Size:** 1811 bp

**RefSeq ORF:** 1350 bp

**Locus ID:** 2741

**UniProt ID:** [P23415](#)

**Cytogenetics:** 5q33.1

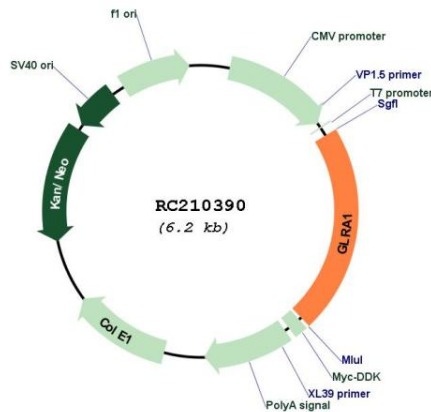
**Protein Families:** Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

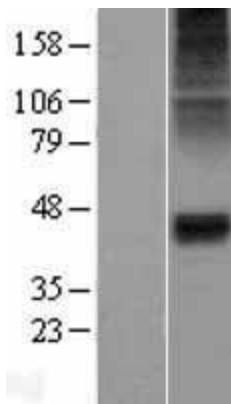
**MW:** 51.7 kDa

**Gene Summary:** The protein encoded by this gene is a subunit of a pentameric inhibitory glycine receptor, which mediates postsynaptic inhibition in the central nervous system. Defects in this gene are a cause of startle disease (STHE), also known as hereditary hyperekplexia or congenital stiff-person syndrome. Multiple transcript variants encoding different isoforms have been found. [provided by RefSeq, Dec 2015]

**Product images:**



Circular map for RC210390



Western blot validation of overexpression lysate (Cat# [LY400062]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210390 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).