

Product datasheet for **RG201928**

Calcium binding protein P22 (CHP1) (NM_007236) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Calcium binding protein P22 (CHP1) (NM_007236) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Calcium binding protein P22
Synonyms:	CHP; p22; p24; Sid470p; SLC9A1BP; SPAX9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201928 representing NM_007236 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTTCTCGGGCTCCACGTTACTGCGGGACGAAGAGCTCGAGGAGATCAAGAAGGAGACCGGCTTTT
CCCACAGTCAAATCACTCGCTTACAGCCGGTTCACCAGCTGGACAAAGGAGAGAATGGGACTCTCAG
CCGGGAAGATTTCCAGAGGATCCAGAACTGCCATCAACCCACTGGGGACCGGATCATCAATGCCTTC
TTCCAGAGGGAGAGACCAGGTAACCTCCGTGGATTCGCAACTTTGGCTCATTTCCGCCCATTTG
AGGATAATGAAAAGAGCAAAGATGTGAATGGACCCGAACCACTCAACAGCCGAAGCAACAACTGCACTT
TGCTTTTCGACTATATGATTTGGATAAAGATGAAAAGATCTCCCGTGATGAGCTGTTACAGGTGCTACGC
ATGATGGTCGGAGTAAATATCTCAGATGAGCAGCTGGGCAGCATCGCAGACAGGACCATTCAGGAGGCTG
ATCAGGATGGGGACAGTGCCATATCTTTCACAGAAATTTGTTAAGGTTTTGGAGAAGGTGGATGTAGAACA
GAAAATGAGCATCCGATTTCTTCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:	>RG201928 representing NM_007236 Red=Cloning site Green=Tags(s)
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MGSRASLLRDEELEEEIKKETGFSHSQITRLYSRFTSLDKGENGLSREDFQRIPELAINPLGDRIINAF
FPEGEDQVNFGRFMRTL AHFRPIEDNEKSKDVNGPEPLNSRSNKLHFAFRLYDLDKDEKISRDELLQVLR
MMVGVNISDEQLGSIADRTIQEADQDGS AISFTEFVKVLEKVDVEQKMSIRFLH

TRTRPLE - GFP Tag - V

Restriction Sites:	Sgfl-MluI
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Cloning Scheme:


ACCN: NM_007236

ORF Size: 585 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_007236.5](#)

RefSeq Size: 3248 bp

RefSeq ORF: 588 bp

Locus ID: 11261

UniProt ID: [Q99653](#)

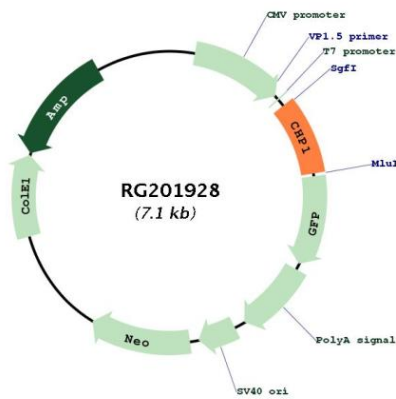
Cytogenetics: 15q15.1

Domains: EFh

Protein Pathways: Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Axon guidance, B cell receptor signaling pathway, Calcium signaling pathway, Long-term potentiation, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Oocyte meiosis, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway

Gene Summary: This gene encodes a phosphoprotein that binds to the Na⁺/H⁺ exchanger NHE1. This protein serves as an essential cofactor which supports the physiological activity of NHE family members and may play a role in the mitogenic regulation of NHE1. The protein shares similarity with calcineurin B and calmodulin and it is also known to be an endogenous inhibitor of calcineurin activity. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201928