

## **Product datasheet for SC323612**

## PRKX (NM\_005044) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: PRKX (NM\_005044) Human Untagged Clone

Tag: Tag Free

Symbol: PRKX

Synonyms: PKX1

Mammalian Cell None

Selection:

Vector: pCMV6-XL6

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF within SC323612 sequence for NM\_005044 edited (data generated by NextGen

Sequencing)

ATGGAGGCGCCCGGGCTGGCCCAGGCGGCCGCGGGAGAGCGACTCCCGCAAGGTGGCG GAGGAGACCCCGACGGGGCGCCCGCGCTCTGCCCCAGCCCTGAGGCGCTGTCGCCGGAG CCGCCTGTGTACAGCCTGCAGGACTTTGACACGCTGGCCACCGTGGGCACTGGGACTTTC GGGCGGTGCACCTGGTGAAGGAGAAGACAGCCAAGCATTTCTTCGCCCTCATGGTGATG AGCATTCCCGACGTCATCCGCCTAAAGCAGGAGCAACACGTACACAATGAGAAGTCTGTC CTGAAGGAAGTCAGCCACCCGTTCCTCATCAGGCTGTTCTGGACGTGGCATGACGAGCGC TTCCTCTACATGCTCATGGAGTACGTGCCGGGCGGCGAGCTCTTCAGCTACCTGCGCAAC CGGGGGCGCTTCTCCAGCACCACGGGGCTCTTCTACTCTGCAGAGATCATCTGTGCCATC GAGTACCTGCACTCCAAAGAGATCGTCTACAGGGACTTGAAGCCAGAGAACATCCTGCTG GATAGGGATGGCCACATTAAGCTCACGGACTTTGGGTTCGCCAAGAAGCTGGTAGACAGG ACTTGGACCCTCTGTGGAACACCCGAGTACCTAGCCCCCGAAGTCATTCAGAGCAAGGGC CACGGAAGGCCGTGGACTGGTGGGCCCTCGGCATCCTGATATTCGAGATGCTTTCGGGG TTTCCTCCGTTTTTGATGACAACCCGTTTGGCATTTATCAGAAAATTCTTGCAGGCAAA ATAGATTTCCCCAGACATTTGGATTTCCATGTAAAAGACCTCATTAAGAAACTGCTCGTG GTTGACAGAACAAGGCGATTAGGAAACATGAAGAACGGGGCGAATGATGTGAAGCATCAT CGGTGGTTCCGCTCGTGGACTGGGAAGCTGTTCCGCAGAGAAAACTGAAGCCTCCCATC GTGCCCAAGATAGCTGGTGACGGCGACACTTCCAACTTCGAAACTTACCCTGAGAATGAC TGGGACACAGCCGCGCCCGTGCCGCAGAAGGATTTAGAAATCTTCAAGAATTTCTGA

Clone variation with respect to NM\_005044.4

177 g=>t;233 a=>t



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5' Read Nucleotide Sequence: >OriGene 5' read for mutant NM\_005044 unedited

GGGGTCCCGCGTAGGAAAAACCCCCGTTTTTCCCCCCCTTAGGGAGAAAAAAGAAG

Kinase Domain Sequence: >SC323612 kinase domain raw sequence. By performing <u>BLASTX</u> analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-

deficient mutation

TACATGCTCATGGAGTACGTGCCGGGCGGCGAGCTCTTCAGCTAC

**Restriction Sites:** Please inquire ACCN: NM\_005044

**Insert Size:** 2710 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis

from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <u>Cell.</u>

2008 May p536-548.

**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:** <u>NM 005044.1</u>, <u>NP 005035.1</u>

RefSeq Size: 6034 bp RefSeq ORF: 1077 bp



## PRKX (NM\_005044) Human Untagged Clone - SC323612

 Locus ID:
 5613

 UniProt ID:
 P51817

 Cytogenetics:
 Xp22.33

**Domains:** pkinase, S\_TK\_X, TyrKc, S\_TKc

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

**Protein Pathways:** Apoptosis, Calcium signaling pathway, Chemokine signaling pathway, Dilated

cardiomyopathy, Gap junction, GnRH signaling pathway, Hedgehog signaling pathway, Insulin

signaling pathway, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Prion diseases, Progesterone-mediated oocyte maturation, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae

infection, Wnt signaling pathway

**Gene Summary:** This gene encodes a serine threonine protein kinase that has similarity to the catalytic

subunit of cyclic AMP dependent protein kinases. The encoded protein is developmentally regulated and may be involved in renal epithelial morphogenesis. This protein may also be involved in macrophage and granulocyte maturation. Abnormal recombination between this

gene and a related pseudogene on chromosome Y is a frequent cause of sex reversal

disorder in XX males and XY females. Pseudogenes of this gene are found on chromosomes X,

15 and Y. [provided by RefSeq, Feb 2010]