

## Product datasheet for RC205821L2V

## OriGene Technologies, Inc.

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## TPX2 (NM\_012112) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: TPX2 (NM 012112) Human Tagged ORF Clone Lentiviral Particle

Symbol: TPX2

**Synonyms:** C20orf1; C20orf2; DIL-2; DIL2; FLS353; GD:C20orf1; HCA519; HCTP4; p100; REPP86

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_012112 **ORF Size:** 2241 bp

**ORF Nucleotide** 

The Of

Sequence:
OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RC205821).

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.

**RefSeg:** NM 012112.4

 RefSeq Size:
 3685 bp

 RefSeq ORF:
 2244 bp

 Locus ID:
 22974

 UniProt ID:
 Q9ULW0

 Cytogenetics:
 20q11.21

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**MW:** 85.7 kDa







## **Gene Summary:**

Spindle assembly factor required for normal assembly of mitotic spindles. Required for normal assembly of microtubules during apoptosis. Required for chromatin and/or kinetochore dependent microtubule nucleation. Mediates AURKA localization to spindle microtubules (PubMed:18663142, PubMed:19208764). Activates AURKA by promoting its autophosphorylation at 'Thr-288' and protects this residue against dephosphorylation (PubMed:18663142, PubMed:19208764). TPX2 is inactivated upon binding to importin-alpha (PubMed:26165940). At the onset of mitosis, GOLGA2 interacts with importin-alpha, liberating TPX2 from importin-alpha, allowing TPX2 to activates AURKA kinase and stimulates local microtubule nucleation (PubMed:26165940).[UniProtKB/Swiss-Prot Function]