Cyclin B1-Venus Reporter Cell Line [RPE1 cycB1-venus/+ KI clone 20G11]

Catalogue number: 153464
Sub-type:
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Cyclin B1-Venus Reporter Cell Line [RPE1 cycB1-venus/+ KI clone 20G11]

Alternate name: CCNB1

Class:
Conjugate:
Description: Somatic knock-in reporter cell with endogenous expression of cyclin B1 fused to the yellow fluorescent protein Venus (cyclin B1-Venus fusion protein). Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This Cyclin B1 cell line functions as a cell cycle reporter across the G2/mitotic-specific phase of the cell cycle. See also the Mad2 and Cyclin A2 versions of these cell lines for a broader analysis of the different phases of the cell cycle. This cell line is an endogenous reporter for cyclin B1 levels and activity.
Purpose:
Parental cell: RPE1
Organism: Human
Tissue: Eye
Model: Reporter
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:

Growth properties:
Production details: To generate the cell line recombinant adenovirus-associated virus (rAAV)-mediated gene targeting was used to fuse the open reading frame (ORF) of yellow fluorescent protein (Venus) with exon 9 of the CCNB1 (Cyclin B1) gene in hTert-RPE1 cells (RPE1; retinal pigment epithelial). RPE1 cells were chosen because they have a normal diploid karyotype, are not transformed and exhibit little cell death when arrested in mitosis; tagging the endogenous Cyclin B1 protein in RPE1 cells avoided the compl...
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: Cyclin B1

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes:

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium: F12/DMEM (Sigma: D6241) + 2mM GlutaMAX??Â•??Â???Â¤(Invitrogen), 10% Foetal Bovine Serum (FBS) + 0.348% sodium bicarbonate; 37oC; 5% CO2.
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions: Liquid Nitrogen
Shipping conditions: Dry ice

Related tools

Related tools: Cyclin A2-Venus Reporter Cell Line [RPE1 cycA2-venus/+ KI clone D6] ; Venus-Mad2 Reporter Cell Line [RPE1 Venus-Mad2/+ KI clone #1] ; Ruby-Mad2 Reporter Cell Line

References

References: Collin et al., 2013. Nat Cell Biol. 15(11):1378-85. PMID: 24096242