

Cyclin A2-Venus Reporter Cell Line [RPE1 cycA2-venus/+ KI clone D6]

Catalogue number: 153463

Sub-type:

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Cyclin A2-Venus Reporter Cell Line [RPE1 cycA2-venus/+ KI clone D6]

Alternate name: CCNA2

Class:

Conjugate:

Description: Somatic knock-in reporter cell line with endogenous expression of Cyclin A2 fused to the yellow fluorescent protein Venus (Cyclin A2-Venus fusion protein). Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. Cyclin A binds and activates CDC2 or CDK2 kinases, and thus this cell line functions as a reporter for both cell cycle G1/S and G2/M transitions. See also the Mad2 and Cyclin B1 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 A2 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 introduce the open reading frame (ORF) of yellow fluorescent protein (Venus) into the last exon of one allele of the CCNA2 (Cyclin A2) 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 A2 protein in RP...

Formulation:**Recommended controls:****Bacterial resistance:****Selectable markers:****Additional notes:**

Target details

Target: Cyclin A2

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 (Invitrogen), 10% Foetal Bovine Serum (FBS) + 0.348% sodium bicarbonate; 37°C; 5% CO₂

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools: Cyclin B1-Venus Reporter Cell Line [RPE1 cycB1-venus/+ KI clone 20G11] ; Venus-Mad2 Reporter Cell Line [RPE1 Venus-Mad2/+ KI clone #1] ; Ruby-Mad2 Reporter Cell Line

References

References:

CancerTools.org