

Anti-CyclinA [E70.1]

Catalogue number: 151015

Sub-type: Primary antibody

Images: https://res.cloudinary.com/ximbio/image/upload/c_fit/5c819aeb-9fd1-4351-8c0b-715ac8312ed3.jpg

Contributor

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Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CyclinA [E70.1]

Alternate name: CCNA1; Cyclin A1; Testicular Tissue Protein Li 34; CT146

Class: Monoclonal

Conjugate: Unconjugated

Description: Cyclins bind to and regulate the activity of the Cyclin Dependent Protein Kinases (CDKs). Cyclin A is involved in the regulation of the cell cycle and is essential for progression through S phase. Cyclin A protein is absent in cells prior to S-phase, during which its levels increase and peak. Cyclin A is a marker for actively proliferating cells and for cells in S phase.

Purpose:

Parental cell: MCF7

Organism: Human

Tissue: Breast

Model: Reporter

Gender:

Isotype: IgG2a

Reactivity: Bovine

Selectivity:

Host: Mouse

Immunogen: Bovine Cyclin A

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The ARE-luciferase reporter plasmid was generated using the pGL3-promoter

vector containing an SV40 promoter upstream of the firefly luciferase gene. They differ in the number of copies of ARE sequences that have been inserted, in head-to-tail orientation, through Nhe I & Xho I restriction sites upstream of the promoter-luc+ transcriptional unit. A plasmid was made containing eight copies of the ARE (5'-GTGACAAAGCA-3', with the minimal functional sequence underlined) present in both rat GSTA2 and mouse gsta1; called pGL-8xARE. A linker with the sequence of 5'-CCC-3' and 5'-GGG-3' on the opposite strand was placed between individual cis-elements. pGL-8xARE, was stably transfected into MCF7 cells using the calcium phosphate method. Transfected cells were selected using 0.8 mg/mL G418 in the media for 3 to 4 weeks. The G418-resistant clones were isolated and screened by measuring their basal and inducible (obtained by treatment with 50 Amol/L t-BHQ) luciferase activities as described above. Positive clones, which showed low background and high inducible luciferase activity, were passaged and maintained in growth medium containing 0.8 mg/mL G418.

Formulation:

Recommended controls: MCF7 parental line

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Cyclin A

Target alternate names:

Target background: Cyclins bind to and regulate the activity of the Cyclin Dependent Protein Kinases (CDKs). Cyclin A is involved in the regulation of the cell cycle and is essential for progression through S phase. Cyclin A protein is absent in cells prior to S-phase, during which its levels increase and peak. Cyclin A is a marker for actively proliferating cells and for cells in S phase.

Molecular weight:

Ic50:

Applications

Application: WB

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium: DMEM with glutamax supplemented with 10% fetal bovine serum and antibiotics. Do not culture beyond 15 passages after revival.

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Gameiro et al. 2017. Sci Rep. 7:45701. PMID: 28361919. ; Discovery of the first dual GSK3 β inhibitor/Nrf2 inducer. A new multitarget therapeutic strategy for Alzheimer's disease. ; MacLeod et al. 2016. Br J Cancer. . PMID: 27824809. ; Aldo-keto reductases are biomarkers of NRF2 activity and are co-ordinately overexpressed in non-small cell lung cancer. ; Basar et al. 2016. Phytochem Anal. 27(5):233-8. PMID: 27527356. ; Utilization of the Ability to Induce Activation of the Nuclear Factor (Erythroid-derived 2)-like Factor 2 (Nrf2) to Assess Potential Cancer Chemopreventive Activity of Liquorice Samples. ; Brunig et al. 2016. Chemosphere. 156:181-90. PMID: 27176940. ; Bioanalytical effect-balance model to determine the bioavailability of organic contaminants in sediments affected by black and natural carbon. ; Brack et al. 2016. Sci Total Environ. 544:1073-118. PMID: 26779957. ; Effect-directed analysis supporting monitoring of aquatic environments--An in-depth overview. ; New melatonin-cinnamate hybrids as multi-target drugs for neurodegenerative diseases: Nrf2-induction, antioxidant effect and neuroprotection. ; Rcker et al. 2015. Org Biomol Chem. 13(10):3040-7. PMID: 25622264. ; Buendia et al. 2015. Future Med Chem. 7(15):1961-9. PMID: 26496465. ; Enhancing the anti-inflammatory activity of chalcones by tuning the Michael acceptor site. ; Escher et al. 2012. J Environ Monit. 14(11):2877-85. PMID: 23032559. ; Water quality assessment using the AREc32 reporter gene assay indicative of the oxidative stress response pathway. ; Wang et al. 2007. Proc Natl Acad Sci U S A. 104(49):19589-94. PMID: 18048326. ; Identification of retinoic acid as an inhibitor of transcription factor Nrf2 through activation of retinoic acid receptor alpha. ; Wang et al. 2006. Cancer Res. 66(22):10983-94. PMID: 17108137. ; Generation of a stable antioxidant response element-driven reporter gene cell line and its use to show redox-dependent activation of nrf2 by cancer chemotherapeutic agents.