

Anti-PCNA [PC10]

Catalogue number: 152584

Sub-type: Primary antibody

Images:

Contributor

Inventor: David Lane

Institute: Absolute Antibody ; Cancer Research UK, London Research Institute: Clare Hall Laboratories

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-PCNA [PC10]

Alternate name:

Class: Recombinant

Conjugate: Unconjugated

Description: Monoclonal antibody which binds a widely conserved proliferating cell nuclear antigen, present in all proliferating cells as a marker of DNA synthesis, with neoplastic diagnostic and prognostic value. Background and Research Application PCNA, also known as polymerase delta auxiliary protein, is essential for DNA replication and is involved in DNA excision and mismatch repair pathways. PCNA is required for cellular DNA synthesis, and in vitro replication of SV40 DNA. It helps to co-ordinate the leading and lagging strand synthesis at the replication fork. PCNA binds to the CDK inhibitor p21, the structure-specific endonucleases Fen1 and XPG, and DNA cytosine 5-methyltransferase (MCMT). PCNA is potentially a therapeutic target in cancer therapy and a useful marker for identifying the proliferation status of tumour tissue (i.e. relevant to prognosis). This antibody can be used to grade different neoplasms, e.g. astrocytoma. It can be of diagnostic and prognostic value. This antibody was first published in 1990 when various monoclonal antibodies for PCNA were created to characterise and understand the function of this protein within cellular DNA synthesis and proliferation.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG2a

Reactivity: Human ; Insect ; Saccharomyces

Selectivity:

Host: Mouse

Immunogen: Protein A-PCNA fusion obtained from pC2T.

Immunogen UNIPROT ID: P12004

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Proliferating cell nuclear antigen, (PCNA), also known as cyclin or polymerase delta accessory protein

Target alternate names:

Target background: Monoclonal antibody which binds a widely conserved proliferating cell nuclear antigen, present in all proliferating cells as a marker of DNA synthesis, with neoplastic diagnostic and prognostic value. Background and Research Application PCNA, also known as polymerase delta auxiliary protein, is essential for DNA replication and is involved in DNA excision and mismatch repair pathways. PCNA is required for cellular DNA synthesis, and in vitro replication of SV40 DNA. It helps to co-ordinate the leading and lagging strand synthesis at the replication fork. PCNA binds to the CDK inhibitor p21, the structure-specific endonucleases Fen1 and XPG, and DNA cytosine 5-methyltransferase (MCMT). PCNA is potentially a therapeutic target in cancer therapy and a useful marker for identifying the proliferation status of tumour tissue (i.e. relevant to prognosis). This antibody can be used to grade different neoplasms, e.g. astrocytoma. It can be of diagnostic and prognostic value. This antibody was first published in 1990 when various monoclonal antibodies for PCNA were created to characterise and understand the function of this protein within cellular DNA synthesis and proliferation.

Molecular weight: 36 kDa

Ic50:

Applications

Application: FACS ; IHC ; IF ; IP ; WB

Application notes:

Handling

Format: Liquid
Concentration: 1 mg/ml
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer: PBS only
Storage conditions: Store at -20° C frozen. Avoid repeated freeze / thaw cycles
Shipping conditions: Shipping at 4° C

Related tools

Related tools: Anti-PCNA [PC10]

References

References: Original hybridoma first published in Waterfield et al. 1982. J Cell Biochem. 20(2):149-61. PMID: 6188757. ; A monoclonal antibody to the human epidermal growth factor receptor.