NEUROMICS

PCNA Data Sheet

Catalog Number:	MO20014	**Host:**	Mouse
Ig Class:	IgG_{2a}	**Species Reactivity:**	Human; Mouse; Rat; Primate
Immunogen Sequence:	Clone: PC10. Rat PCNA induced in the protein A expression vector pR1T2T (Wassem and Lane, 1990).	**Format:**	Liquid- tissue culture supernatant containing 15mM sodium azide.

Applications: Immunohistochemistry (paraffin embedded): 1:100 - 1:200.
60 minutes primary antibody incubation at 25° C.
Standard ABC technique.

Western Blotting: 1:250 - 1:500.
Effective in indirect flow cytometry.

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Storage: Antibody can be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. *Avoid repeated freeze-thaw cycles.*

References: Wei Han, Gui-Nan Liu. EGR-1 decoy ODNs inhibit vascular smooth muscle cell proliferation and neointimal hyperplasia of balloon-injured arteries in rat. doi:10.1016/j.lfs.2009.12.005

Application Notes

PCNA immunoreactivity can be detected in material fixed in a wide range of fixatives including formalin (buffered and unbuffered), methacarn and Bouin's reagent. The time of fixation can markedly affect the intensity of PCNA immunoreactivity. High temperature antigen unmasking using 10mM citrate buffer (pH6.0) may improve staining on overfixed tissues, but due to increased sensitivity using this technique, care must be taken with the interpretation of results. Staining is reduced (and may be abolished) if sections are baked onto glass slides. Air drying overnight onto 3-aminopropyltriethoxysilane (Apes) coated slides is recommended. *Note: not receommended for use in frozen tissue.*

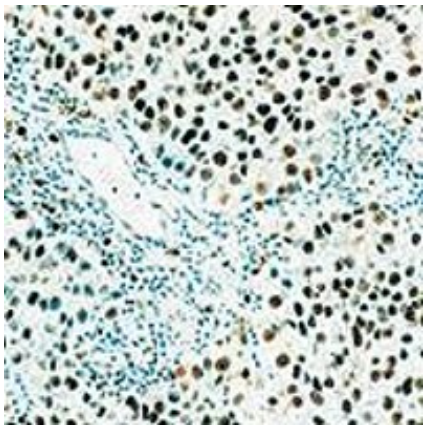
Control Tissues:
Immunohistochemistry - Tonsil or reactive lymph node.
Western Blotting - MCF-7 cell line.
Flow Cytometry - A549 cell line.

FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com

Description/Data:
Proliferating cell nuclear antigen (PCNA) is a 36kD protein which is highly conserved between species. PCNA functions as a co-factor for DNA polymerase delta in S phase and also during DNA synthesis associated with DNA damage repair mechanisms. The PCNA molecule has a half-life in excess of 20 hours, and therefore, may be detected in non-cycling cells eg those in G0 phase.

Image: PCNA staining of Human seminoma: Note nuclear staining of proliferating tumor cells. Paraffin section.



FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com