



Recombinant PCNA Antigen (DAG-T1219)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Purified recombinant full-length human sequence protein. After coating onto ELISA plates the product will bind autoantibodies to PCNA.
Antigen Description	<p>Proliferating cell nuclear antigen (PCNA) is a DNA clamp that acts as a processivity factor for DNA polymerase δ in eukaryotic cells and is essential for replication. PCNA is a homotrimer and achieves its processivity by encircling the DNA, where it acts as a scaffold to recruit proteins involved in DNA replication, DNA repair, chromatin remodeling and epigenetics. Many proteins interact with PCNA via the two known PCNA-interacting motifs PCNA-interacting peptide (PIP) box and AlkB homologue 2 PCNA interacting motif (APIM). Proteins binding to PCNA via the PIP-box are mainly involved in DNA replication whereas proteins binding to PCNA via APIM are mainly important in the context of genotoxic stress.</p> <p>The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome.</p>
Purity	The PCNA autoantigen (34 kDa) is more than 90% pure, as assessed by SDS-polyacrylamide gel electrophoresis.
Concentration	0.1-1.0 mg/ml.
Size	0.20 mg
Preservative	None
Storage	The product is stabilised with 0.1% Micr-O-protect TM. Store at -20°C or below (long term) or at +4°C (short term). Avoid repeated freezing and thawing. Mix thoroughly before use.

GENE INFORMATION

Gene Name	pcnA sliding clamp PCNA [Haloferax volcanii DS2]
Official Symbol	PCNA
Synonyms	PCNA; sliding clamp PCNA;
Entrez Gene ID	8924994
Pathway	Base excision repair; Base excision repair; DNA replication; DNA replication; Mismatch repair; Mismatch repair; Nucleotide excision repair
References	PCNA;sliding clamp PCNA;proliferating cell nuclear antigen;cyclin;MGC8367;DNA polymerase delta auxiliary protein;OTTHUMP00000030189;Cyclin;OTTHUMP00000030190;HGNC: 8729;Entrez Gene: 5111;Ensembl: ENSG00000132646;OMIM: 176740;UniProtKB: P12004;P12004;PCNA_HUMAN;