

Total PCNA Cell-Based Colorimetric ELISA Kit

Catalog No :	KA3356C
Reactivity :	Human;Mouse;Rat
Applications :	ELISA
Gene Name :	PCNA
Human Gene Id :	5111
Human Swiss Prot No :	P12004
Mouse Swiss Prot No :	P17918
Rat Swiss Prot No :	P04961
Storage Stability :	2-8°C/6 months
Detection Method :	Colorimetric
Background :	<p>disease:Antibodies are present in sera from patients with systemic lupus erythematosus.,function:This protein is an auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand.,online information:PCNA entry,PTM:Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18 complex on Lys-164. This induces non-canonical poly-ubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases RNF8 and SHPRH, which are required for DNA repair.,similarity:Belongs to the PCNA family.,subunit:Homotrimer. Interacts with KCTD10. Interacts with PPP1R15A (By similarity). Forms a complex with activator 1 heteropentamer in the presence of ATP. Interacts with POLH, POLK, DNMT1, ERCC5/XPG, FEN1, CDC6, APEX2 and POLDIP2. Interacts with EXO1 and SHPRH. Forms a ternary complex with DNTTIP2 and core histone. Interacts with POLD1, POLD3 and POLD4. Interacts with BAZ1B/WSTF; the interaction is direct.,</p>
Function :	<p>DNA metabolic process, DNA replication, regulation of DNA replication, DNA repair, base-excision repair, base-excision repair, gap-filling, nucleotide-excision repair, nucleotide-excision repair, DNA gap filling, mismatch repair, intracellular protein transport, response to DNA damage stimulus, intracellular signaling</p>

cascade, protein localization, cell proliferation, protein transport, second-messenger-mediated signaling, cellular response to stress, cellular protein localization, establishment of protein localization, intracellular transport, phosphoinositide-mediated signaling, regulation of DNA metabolic process, cellular macromolecule localization,

Subcellular Location :

Nucleus . Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:24939902). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase (PubMed:15543136). Co-localizes with SMARCA5/SNF2H and BAZ1B/WSTF at replication foci during S phase (PubMed:15543136). Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents. .

Sort :

23075

No4 :

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Modifications :

Unmodified

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