



POLH Polyclonal Antibody

Catalog No	YP-Ab-06849
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;ELISA
Gene Name	POLH RAD30 RAD30A XPV
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	POLH Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA polymerase eta;FLJ16395;FLJ21978;POLH;polymerase (DNA directed); eta;RAD30;RAD30 homolog A;RAD30A;XP V;XPV;POLH RAD30 RAD30A XPV; DNA polymerase eta (EC 2.7.7.7) (RAD30 homolog A) (Xeroderma pigmentosum variant type protein)
Observed Band	78-85 kDa
Calculated Molecular Weight	713aa,78 kDa; 414aa,46 kDa
Cell Pathway	Nucleus . Binding to ubiquitinated PCNA mediates colocalization to replication foci during DNA replication and persists at sites of stalled replication forks following UV irradiation (PubMed:12606586, PubMed:16357261, PubMed:24553286). After UV irradiation, recruited to DNA damage sites within 1 hour, to a maximum of about 80%; this recruitment may not be not restricted to cells active in DNA replication (PubMed:22801543). Colocalizes with TRAP1 to nuclear foci (PubMed:24553286). .
Tissue Specificity	Cervix carcinoma,Epithelium,Skin,
Function	catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,cofactor:Divalent metal cations. Prefers magnesium, but can also use manganese.,disease:Defects in POLH are the cause of xeroderma pigmentosum variant type (XPV) [MIM:278750]; also designated as XP-V.



Xeroderma pigmentosum (XP) is an autosomal recessive disease due to deficient nucleotide excision repair. It is characterized by hypersensitivity of the skin to sunlight, followed by high incidence of skin cancer and frequent neurologic abnormalities. XPV shows normal nucleotide excision repair, but an exaggerated delay in recovery of replicative DNA synthesis. Most XPV patients do not develop clinical symptoms and skin neoplasias until a later age. Clinical manifestations are limited to photo-induced deterioration of the skin and eyes., domain: The catalytic core consists of fingers, palm and thumb subdomains,

Background

This gene encodes a member of the Y family of specialized DNA polymerases. It copies undamaged DNA with a lower fidelity than other DNA-directed polymerases. However, it accurately replicates UV-damaged DNA; when thymine dimers are present, this polymerase inserts the complementary nucleotides in the newly synthesized DNA, thereby bypassing the lesion and suppressing the mutagenic effect of UV-induced DNA damage. This polymerase is thought to be involved in hypermutation during immunoglobulin class switch recombination. Mutations in this gene result in XPV, a variant type of xeroderma pigmentosum. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2014],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images