

X-ray repair cross-complementing protein 6 Polyclonal Antibody

Catalog No: #42275

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Description

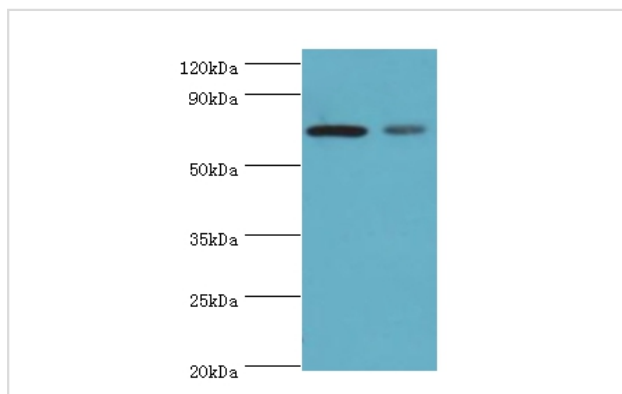
Product Name	X-ray repair cross-complementing protein 6 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Caprylic Acid Ammonium Sulfate Precipitation purified
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total X-ray repair cross-complementing protein 6 polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human X-ray repair cross-complementing protein 6 ptein
Target Name	X-ray repair cross-complementing protein 6
Other Names	5'-deoxyribose-5-phosphate lyase Ku70, 70 kDa subunit of Ku antigen, ATP-dependent DNA helicase 2 subunit 1, ATP-dependent DNA helicase II 70 kDa subunit , CTC box-binding factor 75 kDa subunit
Accession No.	Swiss-Prot#: P12956
Uniprot	P12956
GeneID	2547;
Calculated MW	70kd
Formulation	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Storage	Store at -20°C

Application Details

Western blotting: □ 1:500 - 1:1000

Immunohistochemistry: 1:20 - 1:200

Images



All lanes: X-ray repair cross-complementing protein 6 antibody at 2ug/ml

Lane 1: Hela whole cell lysate

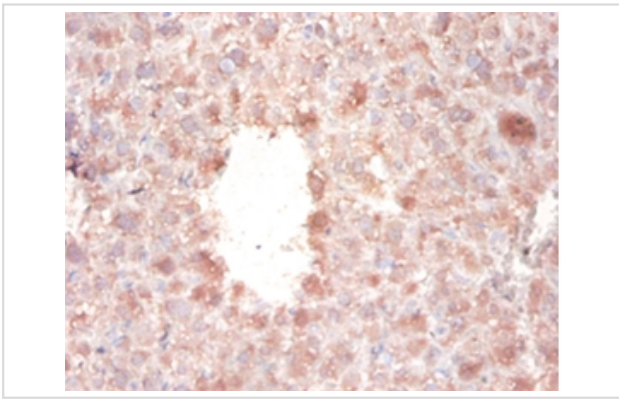
Lane 2: A549 whole cell lysate

secondary

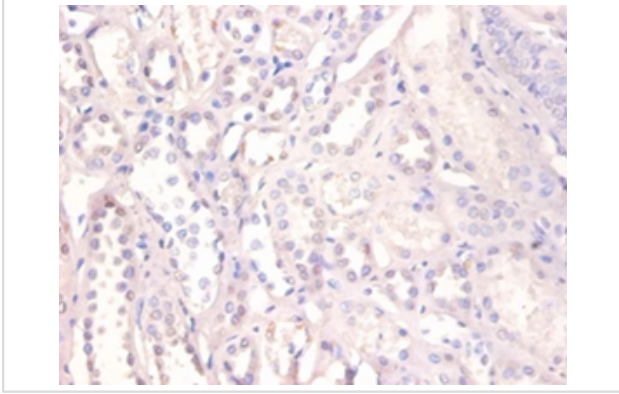
Goat polyclonal to rabbit at 1/10000 dilution

predicted band size : 70kDa

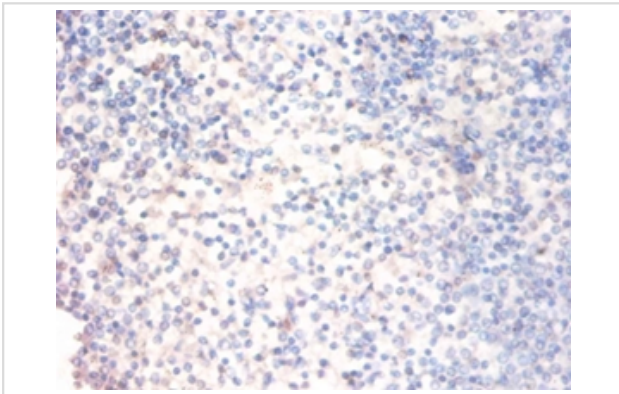
observed band size : 70kDa



Immunohistochemical analysis of paraffin-embedded mouse liver tissue using #42275 at dilution of 1:100.



Immunohistochemical analysis of paraffin-embedded human kidney tissue using #42275 at dilution of 1:100.



Immunohistochemical analysis of paraffin-embedded human spleen tissue using #42275 at dilution of 1:100.

Background

Single stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. Required for osteocalcin gene expression. Probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. 5'-dRP lyase activity allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription.

References

[1] "Cloning and characterization of a cDNA that encodes a 70-kDa novel human thyroid autoantigen." Chan J.Y., Lerman M.I., Prabhakar B.S., Isozaki O., Santisteban P., Koppers R.C., Oates E.L., Notkins A.L., Kohn L.D.J. *Biol. Chem.* 264:3651-365

Note: This product is for in vitro research use only