
XPC Rabbit pAb

Catalog Number: bs-25269R

Target Protein: XPC

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000)

Reactivity: Human, Mouse, Rat (predicted:Pig, Cow, Horse)

Predicted MW: 106 kDa

Entrez Gene: 7508

Swiss Prot: Q01831

Source: KLH conjugated synthetic peptide derived from human XPC: 701-800/940.

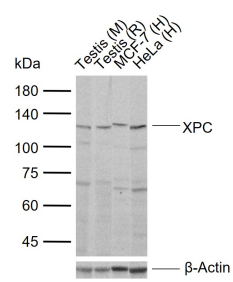
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The XPC complex is proposed to represent the first factor bound at the sites of DNA damage and together with other core recognition factors, XPA, RPA and the TFIIH complex, is part of the pre-incision (or initial recognition) complex. The XPC complex recognizes a wide spectrum of damaged DNA characterized by distortions of the DNA helix such as single-stranded loops, mismatched bubbles or single stranded overhangs. The orientation of XPC complex binding appears to be crucial for inducing a productive NER. XPC complex is proposed to recognize and to interact with unpaired bases on the undamaged DNA strand which is followed by recruitment of the TFIIH complex and subsequent scanning for lesions in the opposite strand in a 5'-to-3' direction by the NER machinery. Cyclobutane pyrimidine dimers (CPDs) which are formed upon UV-induced DNA damage escape detection by the XPC complex due to a low degree of structural perturbation. Instead they are detected by the UV-DDB complex which in turn recruits and cooperates with the XPC complex in the respective DNA repair. In vitro, the XPC:RAD23B dimer is sufficient to initiate NER; it preferentially binds to cisplatin and UV-damaged double-stranded DNA and also binds to a variety of chemically and structurally diverse DNA adducts. XPC:RAD23B contacts DNA both 5' and 3' of a cisplatin lesion with a preference for the 5' side. XPC:RAD23B induces a bend in DNA upon binding. XPC:RAD23B stimulates the activity of DNA glycosylases TDG and SMUG1.

VALIDATION IMAGES



Sample: Lane 1: Mouse Testis tissue lysates Lane 2: Rat Testis tissue lysates Lane 3: Human MCF-7 cell lysates
Lane 4: Human HeLa cell lysates Primary: Anti-XPC (bs-25269R) at 1/1000 dilution Secondary: IRDye800CW
Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 106 kDa Observed band size: 120 kDa