Datasheet for ABIN5712169

XRCC6 Protein (AA 6-222, partial) (His tag)

1 Image

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Overview

Quantity:	100 µg
Target:	XRCC6
Protein Characteristics:	partial, AA 6-222
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This XRCC6 protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	SYYKTEGDEE AEEEQEENLE ASGDYKYSGR DSLIFLVDAS KAMFESQSED ELTPFDMSIQ CIQSVYISKI ISSDRDLLAV VFYGTEKDKN SVNFKNIYVL QELDNPGAKR ILELDQFKGQ QGQKRFQDMM GHGSDYSLSE VLWVCANLFS DVQFKMSHKR IMLFTNEDNP HGNDSAKASR ARTKAGDLRD TGIFLDLMHL KKPGGFDISL FYRDIIS
Purification:	SDS-PAGE
Purity:	> 90 %

Target Details

Target:	XRCC6
Alternative Name:	XRCC6 (XRCC6 Products)
Background:	Single-stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome

Target Details

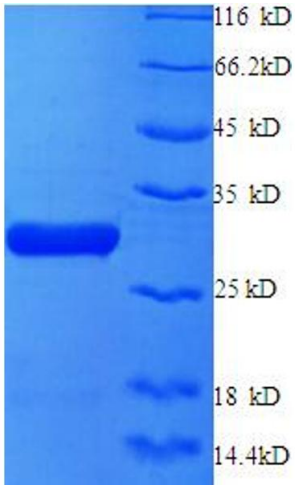
	translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair 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 th together. The assbly 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
Molecular Weight:	28.9 kDa
UniProt:	P12956
Pathways:	DNA Damage Repair

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.1-2 mg/mL
Buffer:	20 mM Tris-HCl based buffer, pH 8.0
Storage:	-80 °C,4 °C,-20 °C
Storage Comment:	Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.



SDS-PAGE

Image 1.