Immunotag™ XPG Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4915
Product Description	Immunotag™ XPG Polyclonal Antibody
Size	50 μg, 100 μg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	XPG
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human ERCC5. AA range:131-180
Specificity	XPG Polyclonal Antibody detects endogenous levels of XPG protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	ERCC5
Accession No.	P28715 P35689
Alternate Names	ERCC5; ERCM2; XPG; XPGC; DNA repair protein complementing XP-G cells; DNA excision repair protein ERCC-5; Xeroderma pigmentosum group G-complementing protein

Antibody Specification	
Description	ERCC excision repair 5, endonuclease(ERCC5) Homo sapiens This gene encodes a single-strand specific DNA endonuclease that makes the 3' incision in DNA excision repair following UV-induced damage. The protein may also function in other cellular processes, including RNA polymerase II transcription, and transcription-coupled DNA repair. Mutations in this gene cause xeroderma pigmentosum complementation group G (XP-G), which is also referred to as xeroderma pigmentosum VII (XP7), a skin disorder characterized by hypersensitivity to UV light and increased susceptibility for skin cancer development following UV exposure. Some patients also develop Cockayne syndrome, which is characterized by severe growth defects, mental retardation, and cachexia. Read-through transcription exists between this gene and the neighboring upstream BIVM (basic, immunoglobulin-like variable motif containing) gene. [provided by RefSeq, Feb 2011],
Cell Pathway/ Category	Nucleotide excision repair,
Protein Expression	Bone marrow,Epithelium,Eye,
Subcellular Localization	nucleus,nucleoplasm,DNA replication factor A complex,holo TFIIH complex,integral component of membrane,DNA-directed RNA polymerase II, holoenzyme,
Protein Function	cofactor:Binds 2 magnesium ions per subunit. They probably participate in the reaction catalyzed by the enzyme. May bind an additional third magnesium ion after substrate binding.,disease:Defects in ERCC5 are the cause of xeroderma pigmentosum complementation group G (XP-G) [MIM:278780]; also known as xeroderma pigmentosum VII (XP7). Xeroderma pigmentosum is an autosomal recessive pigmentary skin disorder characterized by solar hypersensitivity of the skin, high predisposition for developing cancers on areas exposed to sunlight and, in some cases, neurological abnormalities. Some XP-G patients present features of Cockayne syndrome, including dwarfism, sensorineural deafness, microcephaly, mental retardation, pigmentary retinopathy, ataxia, decreased nerve conduction velocities.,function:Single-stranded structure-specific DNA endonuclease involved in DNA excision repair. Makes the 3'incision in DNA nucleotide excision repair (NER). Acts as a cofactor for a DNA glycosylase that removes oxidized pyrimidines from DNA. May also be involved in transcription-coupled repair of this kind of damage, in transcription by RNA polymerase II, and perhaps in other processes too.,similarity:Belongs to the XPG/RAD2 endonuclease family. XPG subfamily.,subunit:Interacts with PCNA.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.