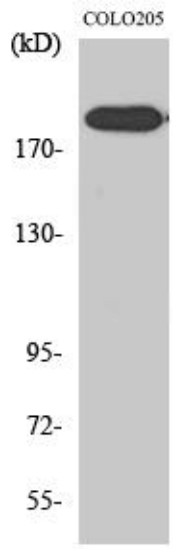
XPG Polyclonal Antibody

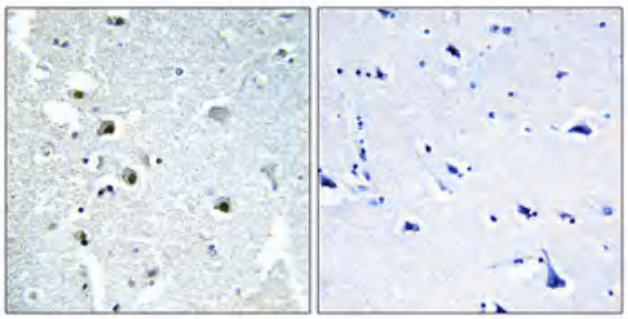
Catalog No	YP-Ab-02156
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	ERCC5
Protein Name	DNA repair protein complementing XP-G cells
Immunogen	The antiserum was produced against synthesized peptide derived from human ERCC5. AA range:131-180
Specificity	XPG Polyclonal Antibody detects endogenous levels of XPG protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA 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	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
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ERCC5; ERCM2; XPG; XPGC; DNA repair protein complementing XP-G cells; DNA excision repair protein ERCC-5; Xeroderma pigmentosum group G-complementing protein
Observed Band	130kD
Cell Pathway	Nucleus . Chromosome . Colocalizes with RAD51 to nuclear foci in S phase (PubMed:26833090). Localizes to DNA double-strand breaks (DBS) during replication stress (PubMed:26833090). Colocalizes with BRCA2 to nuclear foci following DNA replication stress (PubMed:26833090). .
Tissue Specificity	Bone marrow,Epithelium,Eye,
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'incis
Background	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],
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.

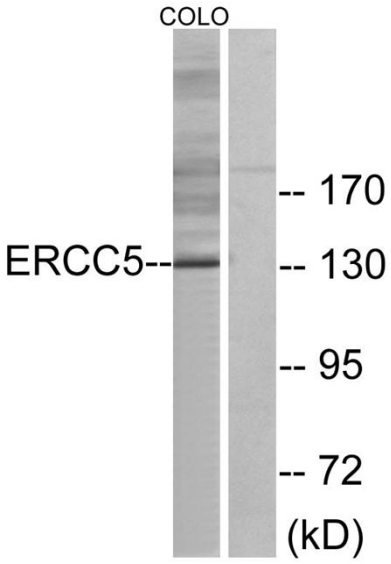
Products Images



Western Blot analysis of various cells using XPG Polyclonal Antibody diluted at 1:2000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from COLO cells, using ERCC5 Antibody. The lane on the right is blocked with the synthesized peptide.