

Rabbit ERCC3 Polyclonal Antibody | anti-ERCC3 antibody

ERCC3 Antibody

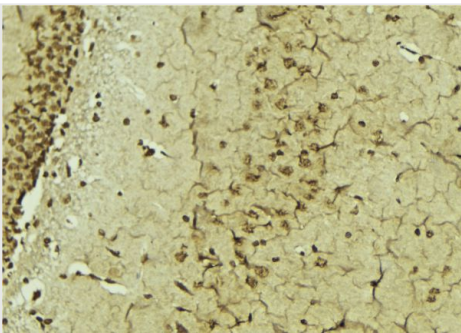
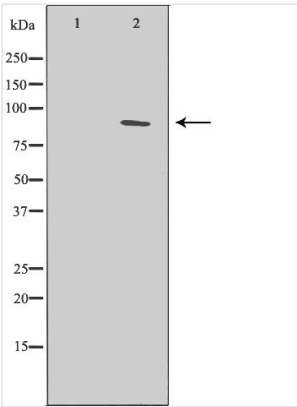
CATALOG # AAA326336	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

ERCC3; Polyclonal Antibody; ERCC3 Antibody; Basic transcription factor 2 89 kDa subunit; BTF 2; BTF2; BTF2 p89; DNA excision repair protein ERCC-3; DNA repair protein complementing XP-B cells; ERCC 3; ercc3; ERCC3_HUMAN; Excision Repair Cross-complementing Rodent Repair deficiency complementation Group 3; GTF2H; RAD 25; RAD25; TFIIH 89 kDa subunit; TFIIH; TFIIH basal transcription factor complex 89 kDa subunit; TFIIH basal transcription factor complex helicase XPB subunit; TFIIH p89; Xeroderma pigmentosum group B-complementing protein; anti-ERCC3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ERCC3 antibody detects endogenous levels of total ERCC3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	782
Applicable Applications for anti-ERCC3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ERCC3
Subcellular Location	Nucleus.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326336 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of extracts of COLO 320, using ERCC3 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-ERCC3 antibody

Description: XPB and XPD are ATPase/helicase subunits of the TFIIH complex that are involved in nucleotide excision repair (NER) to remove lesions and photoproducts generated by UV light (1). XPB and XPD are 3'-5' and 5'-3' DNA helicases, respectively, that play a role in opening of the DNA damage site to facilitate repair (2, 3). XPB and XPD both play an important role in maintaining genomic stability, and researchers have linked mutations of these proteins to Xeroderma Pigmentosum (XP) and Trichothiodystrophy (TTD). XP patients have abnormalities in skin pigmentation and are highly susceptible to skin cancers, while TTD patients exhibit symptoms such as brittle hair, neurological abnormalities, and mild photosensitivity (4). In addition to their role in NER, XPB and XPD are involved in transcription initiation as part of the TFIIH core complex (5). The helicase activity of XPB unwinds DNA around the transcription start site to facilitate RNA polymerase II promoter clearance and initiation of transcription (6). XPD plays a structural role linking core TFIIH components with the cdk-activating kinase (CAK) complex that phosphorylates the C-terminus of the largest subunit of RNA polymerase II, leading to transcription initiation (7). Function: ATP-dependent 3'-5' DNA helicase, component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. The ATPase activity of XPB/ERCC3, but not its helicase activity, is required for DNA opening. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. The ATP-dependent helicase activity of XPB/ERCC3 is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription. Subunit Structure: Component of the 7-subunit TFIIH core complex composed of XPB/ERCC3, XPD/ERCC2, GTF2H1, GTF2H2, GTF2H3, GTF2H4 and GTF2H5, which is active in NER. The core complex associates with the 3-subunit CDK-activating kinase (CAK) module composed of CCNH/cyclin H, CDK7 and MNAT1 to form the 10-subunit holoenzyme (holo-TFIIH) active in transcription. Interacts with PUF60. Interacts with ATF7IP. Interacts with Epstein-Barr virus EBNA2. Similarity: Belongs to the helicase family. RAD25/XPB subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557563
NCBI GeneID	2071
NCBI Accession #	NP_000113.1
NCBI GenBank Nucleotide #	NM_000122.1
UniProt Accession #	P19447; Q53QM0
Molecular Weight	Observed: 89 kDa Predicted: 90 kDa

NCBI Official Full Name	general transcription and DNA repair factor IIH helicase subunit XPB isoform a
NCBI Official Synonym Full Names	ERCC excision repair 3, TFIIH core complex helicase subunit
NCBI Official Symbol	ERCC3
NCBI Official Synonym Symbols	XPB; BTF2; TTD2; GTF2H; RAD25; TFIIH
NCBI Protein Information	general transcription and DNA repair factor IIH helicase subunit XPB
UniProt Protein Name	General transcription and DNA repair factor IIH helicase subunit XPB
UniProt Gene Name	ERCC3
UniProt Synonym Gene Names	XPB; XPBC; TFIIH subunit XPB; BTF2 p89; TFIIH 89 kDa subunit; TFIIH p89

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ercc3-antibody-immunohistochemistry-western-blot-elisa/326336>