

## **ERCC3 Polyclonal Antibody**

Catalog Number: E91714

Amount: 100ul

Background: 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).

**Species:** Rabbit **Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

**Synonyms:** XPB; BTF2; GTF2H; RAD25; TFIIH; **Immunogen:** Recombinant proteinof human ERCC3

Purification: Affinity purification

Reactivity: H M R
Applications: WB IHC
Molecular Weight: 89kDa
Swiss-Prot No.: P19447

**Gene ID:** 2071

References: 1. Oksenych, V. and Coin, F. (2010) Cell Cycle 9, 90-6. 2. Evans, E. et al. (1997) EMBO J

16, 6559-73. 3. Riedl, T. et al. (2003) EMBO J 22, 5293-303. 4. Lehmann, A.R. (2003) Biochimie 85, 1101-11. 5. Drapkin, R. et al. (1994) Nature 368, 769-72. 6. Holstege, F.C. et

al. (1996) EMBO J 15, 1666-77. 7. Rossignol, M. et al. (1997) EMBO J 16, 1628-37.

