# **ERCC3** Conjugated Antibody

Catalog No: #C32399

SAB Signalway Antibody

Package Size: #C32399-AF350 100ul #C32399-AF405 100ul #C32399-AF488 100ul Orders: order@sign

#C32399-AF555 100ul #C32399-AF594 100ul #C32399-AF647 100ul

#C32399-AF680 100ul #C32399-AF750 100ul #C32399-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	ERCC3 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total ERCC3 protein.
Immunogen Description	Recombinant protein of human ERCC3.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	XPB;BTF2;GTF2H;RAD25;TFIIH
Accession No.	Swiss-Prot#:P19447NCBI Gene ID:2071
Uniprot	P19447
GeneID	2071;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	89
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

### **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250
AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

#### **Product Description**

Antibodies were purified by affinity purification using immunogen.

### 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  $30\Omega\frac{1}{2}0\Omega\frac{1}{2}-50\Omega\frac{1}{2}0\Omega\frac{1}{2}$  and  $50\Omega\frac{1}{2}0\Omega\frac{1}{2}-30\Omega\frac{1}{2}0\Omega\frac{1}{2}$  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).

Note: This product is for in vitro research use only