# **APEX1 Conjugated Antibody**

Catalog No: #C32167

SAB Signalway Antibody

Package Size: #C32167-AF350 100ul #C32167-AF405 100ul #C32167-AF488 100ul

#C32167-AF555 100ul #C32167-AF594 100ul #C32167-AF647 100ul

#C32167-AF680 100ul #C32167-AF750 100ul #C32167-Biotin 100ul

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## Description

Product Name	APEX1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total APEX1 protein.
Immunogen Description	Recombinant protein of human APEX1.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	APEX1;APE;APE1;APEN;APEX
Accession No.	Swiss-Prot#:P27695NCBI Gene ID:328
Uniprot	P27695
GeneID	328;
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	36
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

Ape1 (Apurinic/Apyrimidic eEndonuclease 1), also known as Ref1 (Redox effector factor 1), is a multifunctional protein with several biological activities. These include roles in DNA repair and in the cellular response to oxidative stress. Ape1 initiates the repair of abasic sites and is essential for the base excision repair (BER) pathway (1). Repair activities of Ape1 are stimulated by interaction with XRCC1 (2), another essential protein in BER. Ape1 functions as a redox factor that maintains transcription factors in an active, reduced state but can also function in a redox-independent manner as a transcriptional cofactor to control different cellular fates such as apoptosis, proliferation and differentiation (3). Increased expression of Ape1 is associated with many types of cancers including cervical, ovarian, prostate, rhabdomyosarcomas and germ cell tumors (4). Ape1 has been shown to stimulate DNA binding of several transcription factors known to be involved in tumor progression such as Fos, Jun, NF-kB, PAX, HIF-1, HLF and p53 (4). Mutation of the Ape1 gene has also been associated with amyotrophic lateral sclerosis (ALS) (5,6).

Note: This product is for in vitro research use only