

Basic Information

Product Name	Anti-APC1/ANAPC1 (Phospho S355) Antibody
Gene Name	ANAPC1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human
Tested Application	ELISA, WB
Contents	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.01% (w/v) Sodium Azide
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 350-375 of Human Apc1 protein.
Concentration	1.0 mg/mL by UV absorbance at 280 nm
Purification	This product is an affinity purified antibody produced by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. This antibody is specific for phosphorylated human APC1 protein at the pS355 residue. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, dog, rat, and bovine based on 100% homology for the immunogen sequence. Cross-reactivity with APC1 protein from chimpanzee and chicken is expected as the sequence of the immunogen only varies by one amino acid in from these sources (89% homology). Cross-reactivity with APC1 homologues from other sources has not been determined. Minimal reactivity is expected with the non-phosphorylated form of the protein.
Dilution Ratios	ELISA: 1:10,000 - 1:35,000 IP: 1:100 WB: 1:200 - 1:2,000

Storage

Store vial at -20°C prior to opening. Aliquot contents and freeze at -20°C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4°C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.

Background Information

APC1 (also known as Anaphase promoting complex subunit 1, Cyclosome subunit 1, Protein Tsg24, Mitotic checkpoint regulator and ANAPC1) is 1 of at least 11 subunits of the anaphase-promoting complex (APC), which functions at the metaphase-to-anaphase transition of the cell cycle and is regulated by spindle checkpoint proteins. The APC is an E3 ubiquitin ligase that targets cell cycle regulatory proteins for degradation by the proteasome, thereby allowing progression through the cell cycle.

Selected Validation Data

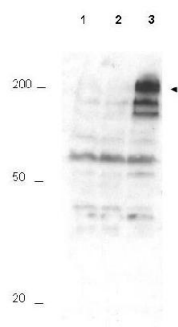


Figure 1. Western blot analysis of ANAPC1, TSG24 using anti-ANAPC1, TSG24 antibody (P03471-2).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ANAPC1, TSG24 antigen affinity purified polyclonal antibody (Catalog # P03471-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-Rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1022) with Tanon 5200 system. A specific band was detected for ANAPC1, TSG24.