

# Tumor Suppressor Inactivation Antibody Sampler Kit

Cat# AK0278

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

## PRODUCT DESCRIPTION

COPS5/CSN5/Jab1 (c-Jun activation domain-binding protein-1) was originally identified as a transcriptional coactivator of c-Jun and subsequently discovered to be a fifth component and integral part of the CSN. As the catalytic center of the CSN, COPS5 is able to integrate multiple functions of the CSN complex such as cell cycle control, transcription, and DNA damage response by regulating the activity of CRLs through deneddylation of cullins. Indeed, COPS5 harbors an Mpr1-Pad1-N-terminal (MPN) domain with an embedded Jab1/CSN5 MPN domain metalloenzyme (JAMM) motif that is essential for the CSN isopeptidase activity responsible for deneddylation of CRLs. COPS5 is an evolutionarily conserved 38 kDa protein in humans, mice, fission yeast, and plants, which suggests that it is critical to cell survival and proliferation. A role for COPS5 as a positive regulator of cellular proliferation is supported by evidence that it functionally inactivates several key tumor suppressors such as p53, RUNX3, Smad4, and p27 Kip1 through altered subcellular localization, degradation, and deneddylation. These findings are underscored by the observation that COPS5 overexpression has been identified in a number of different tumor types and has been implicated in the initiation and progression of several types of cancer. Moreover, COPS5 deficient mice display an embryonically lethal phenotype highlighted by elevated expression of COPS5 targets such as p53 and p27.

## PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340574	JAB1 Polyclonal Antibody	20µL	WB, IHC, ELISA	Human, Mouse	Rabbit
A340720	p53 Polyclonal Antibody	20µL	WB, ELISA	Human	Rabbit
A340734	Smad4 Polyclonal Antibody	20µL	WB, IHC-p, IF, ELISA	Human, Mouse, Rat, Monkey	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120µL	WB, ELISA	Rabbit	Goat

## PRODUCT USE LIMITATION

These products are intended for research use only.