

Anti-ASPP2 (RABBIT) Antibody ASPP2 Antibody Catalog # ASR4416

### **Specification**

## Anti-ASPP2 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, I, LCI This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 125 kDa in size corresponding to ASPP2 by western blotting in the appropriate cell lysate or extract.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal sequence of human ASPP2.
Preservative	0.01% (w/v) Sodium Azide

# Anti-ASPP2 (RABBIT) Antibody - Additional Information

Gene ID 7159

**Other Names** 7159

#### Purity

This Protein A purified antibody is directed against human ASPP2. The product was purified from monospecific antiserum by Protein A affinity chromatography. Minimal reactivity occurs against ASPP1. A BLAST analysis was used to suggest cross-reactivity with ASPP2 from macaque and dog sources based on a 100% homology with the immunizing sequence. Expect partial reactivity with ASPP2 from mouse and rat sources based on an 80% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.

### Storage Condition

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.



### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

# Anti-ASPP2 (RABBIT) Antibody - Protein Information

Name TP53BP2

Synonyms ASPP2, BBP

#### Function

Regulator that plays a central role in regulation of apoptosis and cell growth via its interactions with proteins such as TP53 (PubMed:<a href="http://www.uniprot.org/citations/12524540" target="\_blank">12524540</a>). Regulates TP53 by enhancing the DNA binding and transactivation function of TP53 on the promoters of proapoptotic genes in vivo. Inhibits the ability of NAE1 to conjugate NEDD8 to CUL1, and thereby decreases NAE1 ability to induce apoptosis. Impedes cell cycle progression at G2/M. Its apoptosis-stimulating activity is inhibited by its interaction with DDX42.

#### **Cellular Location**

Cytoplasm, perinuclear region. Nucleus. Note=Predominantly found in the perinuclear region. Some small fraction is nuclear. Sequester in the cytoplasm on overexpression of DDX42

#### **Tissue Location**

Widely expressed. Expressed in spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocyte. Reduced expression in breast carcinomas expressing a wild- type TP53 protein. Overexpressed in lung cancer cell lines

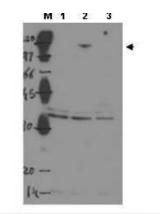
### Anti-ASPP2 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-ASPP2 (RABBIT) Antibody - Images





Western blot using Rockland's Protein A purified anti-ASPP2 to detect over-expressed ASPP2 in MCF-7 cells (Lane 2, arrowhead). Lane 1 is a nontransfected control. Lane 3 is MCF-7 cells over-expressing ASPP1. Cell extracts were electrophoresed and transferred to nitrocellulose. The membrane was probed with the primary antibody at a 1:1,000 dilution. The identity of the lower MW band at approximately 40kDa is unknown. Personal Communication, H. Yang, Univ. Oklahoma, Oklahoma City, OK.

# Anti-ASPP2 (RABBIT) Antibody - Background

ASPP (ankyrin-repeat-, SH3-domain- proline-rich-region protein) proteins (ASPP1, ASPP2 and iASPP) represent a new family of p53 binding proteins. ASPP1 and ASPP2 bind and enhance p53-mediated apoptosis. In contrast, iASPP functionally inactivates p53. ASPPs may also regulate p63- and p73-mediated apoptosis. Both ASPP1 and 2 directly interact with p53 and specifically enhance the apoptotic function of p53 by stimulating its DNA binding and transactivation function on promoters of pro-apoptotic genes, such as Bax and PIG-3. Not all cell cycle arrest genes are affected, such as p21. Interestingly, expression of ASPP is frequently down-regulated in human breast carcinomas expressing wild-type p53 but not mutant p53. Therefore, ASPP might regulate the tumor suppression function of p53 in vivo.