

Anti-ASPP1 (RABBIT) Antibody ASPP1 Antibody Catalog # ASR5399

#### **Specification**

## Anti-ASPP1 (RABBIT) Antibody - Product Information

| Host<br>Conjugate<br>Target Species<br>Reactivity<br>Clonality<br>Application<br>Application Note | Rabbit<br>Unconjugated<br>Human<br>Human<br>Polyclonal<br>WB, E, I, LCI<br>This affinity purified antibody has been<br>tested for use in ELISA and western<br>blotting. Specific conditions for reactivity<br>should be optimized by the end user.<br>Expect a band approximately 120 kDa in<br>size corresponding to ASPP1 by western<br>blotting in the appropriate cell lysate or<br>extract. |
|---|--|
| Physical State<br>Buffer  | Liquid (sterile filtered)<br>0.02 M Potassium Phosphate, 0.15 M<br>Sodium Chloride, pH 7.2   |
| Immunogen   | This affinity purified antibody was<br>prepared from whole rabbit serum<br>produced by repeated immunizations with<br>a synthetic peptide corresponding to an<br>internal sequence of human ASPP1.   |
| Preservative  | 0.01% (w/v) Sodium Azide   |

# Anti-ASPP1 (RABBIT) Antibody - Additional Information

Gene ID 23368

Other Names 23368

#### Purity

This affinity purified antibody is directed against human ASPP1. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. Minimal reactivity occurs against ASPP2. A BLAST analysis was used to suggest cross-reactivity with ASPP1 from mouse based on a 92% 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-ASPP1 (RABBIT) Antibody - Protein Information

Name PPP1R13B

Synonyms ASPP1, KIAA0771

Function

Regulator that plays a central role in regulation of apoptosis via its interaction with p53/TP53 (PubMed:<a href="http://www.uniprot.org/citations/11684014" target="\_blank">11684014</a>, PubMed:<a href="http://www.uniprot.org/citations/12524540" target="\_blank">1252454014</a>, 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.

**Cellular Location** Cytoplasm. Nucleus. Note=Predominantly cytoplasmic. Some fraction is nuclear

Tissue Location

Reduced expression in breast carcinomas expressing a wild-type TP53 protein.

## Anti-ASPP1 (RABBIT) Antibody - Protocols

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

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

Anti-ASPP1 (RABBIT) Antibody - Images

| 1 | 2 | 3 |
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| 1 | _ | 3 |
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Western blot using Rockland's affinity purified anti-ASPP1 to detect over-expressed ASPP1 in MCF-7 cells (lane 2, arrowhead). Lane 1 is a non-transfected control. Lane 3 is MCF-7 cells over-expressing ASPP2. 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 50kDa is unknown. Primary experimental data indicate that the unknown band intensifies in extracts from p53 siRNA knockdown cells. Personal Communication, H. Yang, Univ. Oklahoma, Oklahoma City, OK.

# Anti-ASPP1 (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.