

# HSPC142 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8573a

#### Specification

## HSPC142 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9NWV8</u> <u>O6AXK4</u>, <u>O08E57</u>, <u>NP\_054892</u> Human Bovine, Zebrafish Rabbit Polyclonal Rabbit IgG 36560 9-37

### HSPC142 Antibody (N-term) - Additional Information

Gene ID 29086

**Other Names** BRISC and BRCA1-A complex member 1, Mediator of RAP80 interactions and targeting subunit of 40 kDa, New component of the BRCA1-A complex, BABAM1, C19orf62, MERIT40, NBA1

#### Target/Specificity

This HSPC142 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-37 amino acids from the N-terminal region of human HSPC142.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

HSPC142 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### HSPC142 Antibody (N-term) - Protein Information

Name BABAM1



**Function** Component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'- linked ubiquitin on histones H2A and H2AX. In the BRCA1-A complex, it is required for the complex integrity and its localization at DSBs. Component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates (PubMed:24075985, PubMed:26195665). In these 2 complexes, it is probably required to maintain the stability of BABAM2 and help the 'Lys-63'-linked deubiquitinase activity mediated by BRCC3/BRCC36 component. The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiquitination of the interferon receptor IFNAR1; deubiquitination increases IFNAR1 activity by enhancing its stability and cell surface expression (PubMed:24075985). Down-regulates the response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiquitination (PubMed:24075985).

### **Cellular Location**

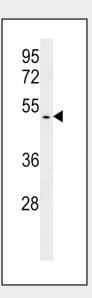
Cytoplasm. Nucleus Note=Localizes at sites of DNA damage at double-strand breaks (DSBs)

# HSPC142 Antibody (N-term) - Protocols

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

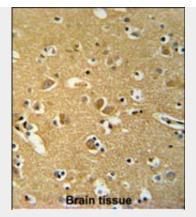
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

## HSPC142 Antibody (N-term) - Images



HSPC142 Antibody (N-term) (Cat. #AP8573a) western blot analysis in T47D cell line lysates (15ug/lane).This demonstrates the HSPC142 antibody detected the HSPC142 protein (arrow).





HSPC142 Antibody (N-term) (Cat. #AP8573a) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HSPC142 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# HSPC142 Antibody (N-term) - Background

HSPC142 is a component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX. In the BRCA1-A complex, it is required for the complex integrity and its localization at DSBs. HSPC142 probably also plays a role as a component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin. In these 2 complexes, it is probably required to maintain the stability of BRE/BRCC45 and help the 'Lys-63'-linked deubiquitinase activity mediated by BRCC3/BRCC36. component

### HSPC142 Antibody (N-term) - References

Solyom, S., et al. Breast Cancer Res. Treat. 120(1):165-168(2010) Cooper, E.M., et al. EMBO J. 28(6):621-631(2009) Olsen, J.V., et al. Cell 127(3):635-648(2006)