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HSPC142 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8573a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NWV8
Other Accession	Q6AXK4, Q08E57, NP_054892
Reactivity	Human
Predicted	Bovine, Zebrafish, Mouse, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20467
Calculated MW	36560
Antigen Region	9-37

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~~1:100~500 E~~Use at an assay dependent concentration.
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.

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 deubiquitinating NUMA1 (PubMed:26195665). Plays a role in interferon signaling via its role in the 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)

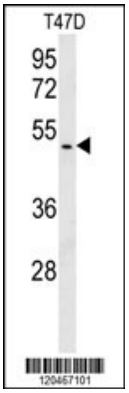
Background

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

References

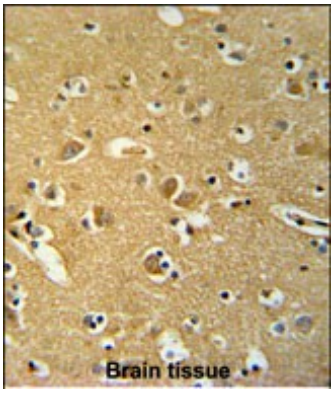
Solyom, S., et al. Breast Cancer Res. Treat. 120(1):165-168(2010)
Cooper, E.M., et al. EMBO J. 28(6):621-631(2009)
Olsen, J.V., et al. Cell 127(3):635-648(2006)

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.