abcam

ab174267

Anti-HSPC111 antibody [EPR11971]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11971
Purification technique	Affinity purification Protein A
Concentration	0.189 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information NOP16

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	HSPC111 also known as Nucleolar Protein 16 or NOL16 is a nucleolar protein with a molecular mass of approximately 111 kDa. It performs mechanical functions within the nucleolus and exhibits high expression levels in actively dividing cells like those found in embryonic tissues and malignant tumors. The protein's involvement in ribosomal biogenesis a critical cellular process contributes to its expression pattern. Researchers have observed HSPC111 overexpression in cancerous tissues indicating its importance in cell proliferation.
Biological function summary	HSPC111 contributes significantly to ribosomal RNA (rRNA) processing by forming part of the nucleolus. It interacts with multiple ribosomal biogenesis factors facilitating the synthesis and maturation of rRNA. As part of a larger ribonucleoprotein complex HSPC111 guides the processing and assembly of ribosomal subunits a step essential for efficient protein synthesis. This role showcases its integral nature in controlling translation rates within cells especially those requiring rapid protein production.
Pathways	HSPC111 plays an integral role in the ribosome biogenesis pathway where it collaborates with other nucleolar proteins like nucleophosmin (NPM1). The protein also forms connections within the p53 stress response pathway an interconnection that links ribosome production to cellular stress signals. Its activity impacts these pathways by regulating the availability of functional ribosomes which suggests its influence on cellular stress responses and apoptotic processes when dysfunction occurs.
Associated diseases and disorders	HSPC111 exhibits notable associations with cancer and ribosomopathies. Elevated levels of HSPC111 are frequently found in various cancers suggesting its potential role as a biomarker or therapeutic target. It interacts with proteins like MYC a well-known oncogene driving unchecked cellular proliferation. In ribosomopathies abnormal HSPC111 activity contributes to improper ribosome production impacting protein synthesis and cellular growth therefore linking it to disorders where ribosome function is impaired.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

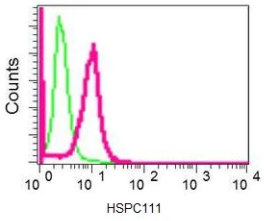
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

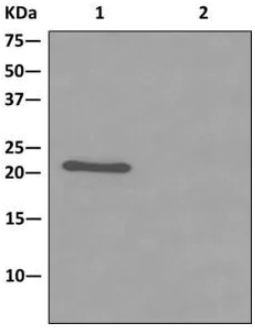
3 product images



Flow Cytometry (Intracellular) - Anti-HSPC111 antibody [EPR11971] (ab174267)

HSPC111 Flow Cytometry (Intracellular) staining using rabbit Anti-HSPC111 antibody

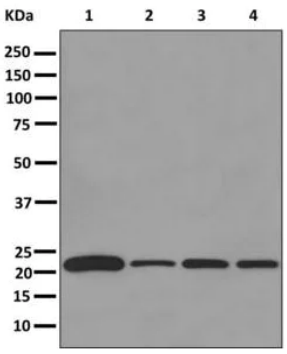
Intracellular flow cytometric analysis of permeabilized K562 cells usingab174267 at a 1/10 dilution (red)or a rabbit IgG (negative) (green).



Immunoprecipitation - Anti-HSPC111 antibody [EPR11971] (ab174267)

Western blot analysis on immunoprecipitation pellet from (Lane 1) Human fetal liver cells lysate or (Lane 2) 1XPBS (negative control) using ab174267 at a 1/10 dilution and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.
All lanes:
Immunoprecipitation - Anti-HSPC111 antibody [EPR11971] (ab174267)

Predicted band size: 21 kDa



Western blot - Anti-HSPC111 antibody [EPR11971] (ab174267)

All lanes:
Western blot - Anti-HSPC111 antibody [EPR11971] (ab174267) at 1/1000 dilution

Lane 1:
Fetal liver tissue lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
K562 cell lysate at 10 µg

Lane 4:
Raji cell lysate at 10 µg

Predicted band size: 21 kDa

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