abcam

ab249423

Anti-POGZ antibody [EPR10612] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR10612
Purification technique	Affinity purification Protein A
Concentration	0.962 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information POGZ

Function	Plays a role in mitotic cell cycle progression and is involved in kinetochore assembly and mitotic sister chromatid cohesion. Probably through its association with CBX5 plays a role in mitotic chromosome segregation by regulating aurora kinase B/AURKB activation and AURKB and CBX5 dissociation from chromosome arms (PubMed:20562864). Promotes the repair of DNA double-strand breaks through the homologous recombination pathway (PubMed:26721387).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Storage information	Do Not Freeze

Notes

ab249423 is the carrier-free version of ab167408.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	POGZ also known as Pogo Transposable Element with ZNF Domain is a zinc finger protein with a molecular weight of approximately 155 kDa. Scientists have studied POGZ for its role in transcription regulation. This protein localizes primarily in the nucleus and is expressed in various human tissues with higher expression levels observed in the brain. POGZ interacts with chromatin and may play a role in the regulation of gene expression through chromatin remodeling.

Biological function summary	POGZ influences genetic expression by participating in the chromatin modification process. It acts as a member of the protein complex that includes histone modifiers modifying the chromatin landscape to allow or restrict access for transcription machinery. The protein impacts neuronal differentiation and brain development among other processes therefore bearing significance in neurodevelopmental biology. It partners with several key proteins to achieve its biological functions contributing to the regulation of genes required for proper cellular function.
Pathways	More than one biological pathway has involved POGZ. Notably it participates in the chromatin remodeling pathway important for modulating chromatin structure and gene accessibility. POGZ interacts with proteins such as CHD4 part of the NuRD complex within these pathways. These interactions facilitate access to DNA regulating the transcription of genes tied to cellular differentiation and proliferation.
Associated diseases and disorders	Genetics has linked POGZ to neurodevelopmental disorders such as intellectual disability and autism spectrum disorder (ASD). Mutations in the POGZ gene disrupt normal function contributing to these conditions. POGZ has connections with ATRX another protein associated with intellectual disabilities. Research continues to explore how these interactions contribute to the pathogenesis of neurodevelopmental disorders offering potential therapeutic targets in these conditions.

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

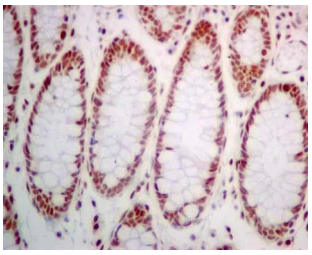
We do not recommend this combination. It is not covered by our product promise.

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.

8 product images

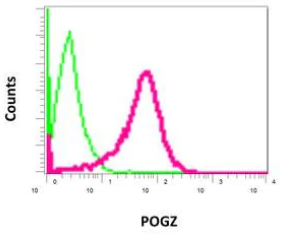


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
ab167408 showing +ve staining in Human normal colon.

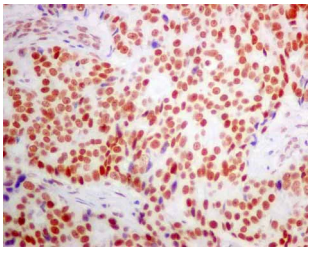
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

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

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized SH-SY5Y cells, labeling POGZ with ab167408 at 1/10 dilution (red) or a Rabbit IgG negative (green).

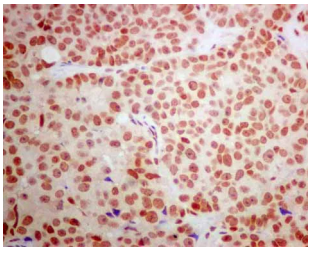


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
ab167408 showing +ve staining in Human breast carcinoma.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

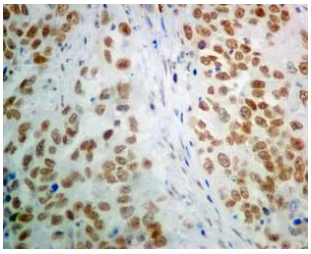


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
ab167408 showing +ve staining in Human ovarian carcinoma.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

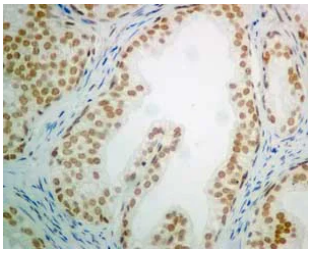


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human cervical carcinoma tissue labeling POGZ with ab167408 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

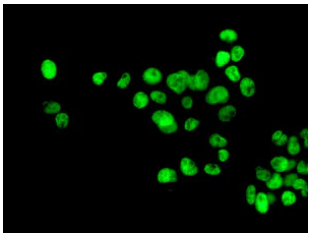


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling POGZ with ab167408 at 1/50 dilution.

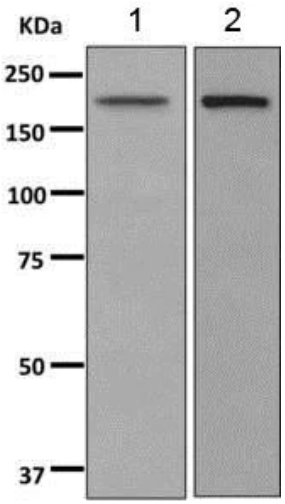
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.Immunofluorescent staining of HepG2 cells labeling POGZ with ab167408 at 1/100 dilution.



Western blot - Anti-POGZ antibody [EPR10612] - BSA and Azide free (ab249423)

POGZ Western blot staining using rabbit Anti-POGZ antibody

This data was developed using ab167408, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-POGZ antibody [EPR10612] (ab167408) at 1/1000 dilution

Lane 1:
HepG2 cell lysate at 10 µg

Lane 2:
SH-SY5Y cell lysate at 10 µg

Secondary

All lanes:
HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 155 kDa

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