abcam

Product datasheet

Anti-FEN1 antibody [EPR4460(2)] - BSA and Azide free ab239948



4 Images

Overview

Product name Anti-FEN1 antibody [EPR4460(2)] - BSA and Azide free

Description Rabbit monoclonal [EPR4460(2)] to FEN1 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab239948 is the carrier-free version of <u>ab109132</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

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.

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.

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 production

For more information see here.

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

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR4460(2)

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab239948 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt,ICC/IF or IP.

Target

Function

Structure-specific nuclease with 5'-flap endonuclease and 5'-3' exonuclease activities involved in DNA replication and repair. During DNA replication, cleaves the 5'-overhanging flap structure that is generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. It enters the flap from the 5'-end and then tracks to cleave the flap base, leaving a nick for ligation. Also involved in the long patch base excision repair (LP-BER) pathway, by cleaving within the apurinic/apyrimidinic (AP) site-terminated flap. Acts as a genome stabilization factor that prevents flaps from equilibrating into structurs that lead to duplications and deletions. Also possesses 5'-3' exonuclease activity on nicked or gapped double-stranded DNA, and exhibits RNase H activity. Also involved in replication and repair of rDNA and in repairing mitochondrial DNA.

Sequence similarities

Belongs to the XPG/RAD2 endonuclease family. FEN1 subfamily.

Post-translational modifications

Acetylated by EP300. Acetylation inhibits both endonuclease and exonuclease activity. Acetylation also reduces DNA-binding activity but does not affect interaction with PCNA or EP300.

Phosphorylation upon DNA damage induces relocalization to the nuclear plasma.

Phosphorylation at Ser-187 by CDK2 occurs during late S-phase and results in dissociation from

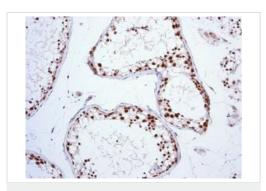
PCNA.

Methylation at Arg-192 by PRMT5 impedes Ser-187 phosphorylation and increases interaction

Cellular localization

Nucleus > nucleolus. Nucleus > nucleoplasm. Mitochondrion. Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage.

Images



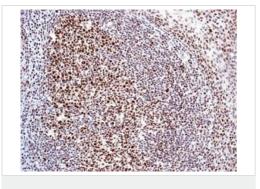
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FEN1 antibody

[EPR4460(2)] - BSA and Azide free (ab239948)

Immunohistochemical analysis of paraffin-embedded Human testis tissue using **ab109132** at a dilution of 1/500.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109132).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



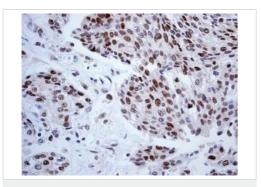
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FEN1 antibody

[EPR4460(2)] - BSA and Azide free (ab239948)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using <u>ab109132</u> at a dilution of 1/500.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109132).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



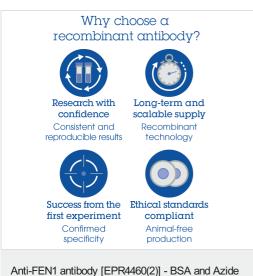
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FEN1 antibody

[EPR4460(2)] - BSA and Azide free (ab239948)

Immunohistochemical analysis of paraffin-embedded Human urothelial carcinoma tissue using <u>ab109132</u> at a dilution of 1/500.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109132).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



free (ab239948)

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