abcam

Product datasheet

Alexa Fluor® 488 Anti-PARP1 antibody [E102] ab237411

Recombinant RabMAb

3 Images

Overview

Product name Alexa Fluor® 488 Anti-PARP1 antibody [E102]

Description Alexa Fluor® 488 Rabbit monoclonal [E102] to PARP1

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications Suitable for: ICC/IF, Flow Cyt (Intra)

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

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

Positive control ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells

General notes 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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outlicensing@thermofisher.com.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

Monoclonal Clonality

Clone number E102 Isotype lgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab237411 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
ICC/IF		1/1000. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)
Flow Cyt (Intra)		1/500.

Target

Function Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a

limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism.

This modification follows DNA damages and appears as an obligatory step in a

detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and

negatively regulates the transcription of MTUS2/TIP150.

Sequence similarities Contains 1 BRCT domain.

> Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain. Contains 2 PARP-type zinc fingers.

Post-translational

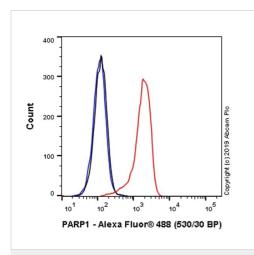
Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR. modifications

Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to

DNA damage sites.

S-nitrosylated, leading to inhibit transcription regulation activity.

Cellular localization Nucleus.

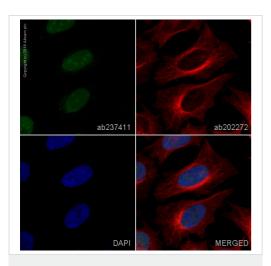


Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-PARP1 antibody [E102] (ab237411)

Overlay histogram showing HeLa cells stained with ab237411 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab237411, 1/500 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal)
Alexa Fluor[®] 488 (<u>ab199091</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

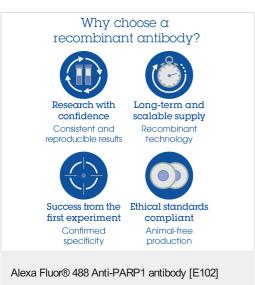
Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-PARP1 antibody [E102] (ab237411)

ab237411 staining PARP1 in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab237411 at 1/1000 dilution (shown in green) and ab202272, Rabbit monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Alexa Fluor® 488 Anti-PARP1 antibody [E102] (ab237411)

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