abcam

Product datasheet

Anti-Poly (ADP-Ribose) Polymer antibody ab14460

★★★★★ 2 Abreviews 15 References 4 Images

Overview

Product name Anti-Poly (ADP-Ribose) Polymer antibody

Description Chicken polyclonal to Poly (ADP-Ribose) Polymer

Host species Chicken

Specificity This antibody recognizes Poly (ADP-Ribose) Polymer synthesized by a variety of poly(ADP-

> ribose) polymerases (PARP)-related enzymes, including PARP1, 2, 3, tankyrase, vPARP, sPARP and others. It does not cross-react with ADP-ribose, 5'-AMP, or yeast RNA as tested by

> ELISA. It does cross-react to bovine serum albumin due to its use as a carrier for the immunogen.

Tested applications Suitable for: ICC/IF, IHC-Fr, WB, ELISA, IHC-P

Species reactivity Reacts with: Human, Species independent

Immunogen Other Immunogen Type corresponding to Poly (ADP-Ribose) Polymer. Purified Poly (ADP-

Ribose) Polymer mixed with methylated bovine serum albumin.

General notes The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 0.316% Tris HCI, 0.87% Sodium chloride

Purity IgY fraction

Clonality Polyclonal

Isotype lgΥ

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab14460 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	★★★ ☆☆ <u>(1)</u>	1/200.
IHC-Fr		Use at an assay dependent concentration.
WB	★ sile sile sile (1)	Use a concentration of 1 - 10 µg/ml. Predicted molecular weight: 1 kDa.
ELISA		Use at an assay dependent concentration. It is recommended to start with a 1/100 dilution.
IHC-P		Use at an assay dependent concentration.

Target

Relevance

Poly (ADP-Ribose) is a polymer synthesized by a class of enzymes named poly(ADP-ribose) polymerases (PARP). Using NAD+ as substrate, PARP catalyzes the formation of the polymer poly (ADP-Ribose), with chain lengths ranging from 2 to 300 residues, containing approximately 2% branching in the chain. Poly (ADP-Ribose) polymer becomes attached to nuclear proteins, and to PARP itself (automodification). Under normal conditions, cells display low basal level of poly (ADP-Ribose) polymer, which can dramatically increase in cells exposed to DNA damaging agents (irradiation, alkylation, etc.). This increase of polymer synthesis is usually transient and is followed by a rapid degradation phase with a short half life which can be less than 1 min. The low endogenous level of polymer in unstimulated cells and its rapid catabolism during DNA damage has been ascribed to high activity of the polymer catabolizing enzyme poly(ADP-ribose) glycohydrolyase (PARG).

Images



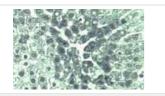
Immunohistochemistry (Frozen sections) - Anti-Poly (ADP-Ribose) Polymer antibody (ab14460)

Poly (ADP-Ribose) Polymer staining of untreated rat liver, with ab14460 at a concentration of 20µg/ml.



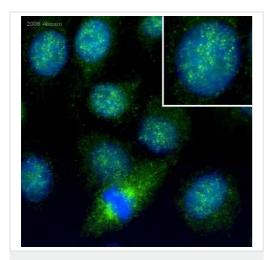
Western blot - Anti-Poly (ADP-Ribose) Polymer antibody (ab14460)

Western blot analysis of Poly (ADP-Ribose) Polymer. Lane 1: control HL60 cells (75,000 cells). Lane 2: cells automodified with PARP1. Note the apparent shift in molecular weight PARP1 from 116kDa to a broad range >250kDa due to various extents of Poly (ADP-Ribose) Polymer automodification. ab14460 was used at a concentration of 10 μ g/ml.



Immunohistochemistry (Frozen sections) - Anti-Poly (ADP-Ribose) Polymer antibody (ab14460)

Poly (ADP-Ribose) Polymer staining of livers from rats injected with diethylnitrosamine (200 mg/kg). The livers were removed and rapidly processed 10 hr later, at peak polymer induction. ab14460 was used at a concentration of 20µg/ml



Immunocytochemistry/ Immunofluorescence - Anti-Poly (ADP-Ribose) Polymer antibody (ab14460)

This image is courtesy of an Abreview submitted by $\mbox{\rm Dr}$ Alexander Rapp

ab14460 staining cultured human HeLa cells by ICC/IF. Cells were PFA fixed and permeabilized in 0.5% Triton X100 prior to blocking in 5% BSA for 1 hour at 20°C. The primary antibody was diluted 1/200 and incubated with the sample for 1 hour at 20°C. A Cy5® conjugated donkey anti-chicken antibody diluted 1/300 was used as the secondary.

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