

## Datasheet: TZA021

<b>Description:</b>	ANTI MONO-ADP-RIBOSE
<b>Specificity:</b>	MONO-ADP-RIBOSE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD33205ad
<b>Isotype:</b>	Fab antibody
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			
Western Blotting	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

### Target Species

Protein/peptide tag

### Product Form

A monovalent human recombinant Fab selected from the HuCAL® phage display library and expressed in a proprietary *E. coli* strain. The antibody is tagged with a DYKDDDDK tag, a SpyTag version 2 (VPTIVMVDAYKRYK) and a His6-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

### Preparation

Recombinant Fab antibody expressed in *E. coli* and purified by affinity chromatography

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.0095% MIT

### Carrier Free

Yes

### Approx. Protein

Total protein concentration 0.5 mg/ml

## Concentrations

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**Immunogen** ARTKQTARKS(ADPr)TGGKAC

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**Specificity** **Anti mono-ADP-ribose antibody, clone AbD33205ad**, recognizes mono-adenosine diphosphate (ADP)-ribosylation. ADP-ribosylation is a reversible post-translational modification that occurs in multicellular organisms as well as some lower unicellular eukaryotes, but is absent in prokaryotes and yeast ([Bürkle 2005](#)). ADP ribosylation has been shown to play critical roles in many physiological and pathological processes, including bacterial pathogenesis and signaling and metabolism to control chromatin-related processes including transcription and DNA repair ([Bonfiglio et al. 2020](#), [Bütepage et al. 2015](#)).

Members of the ADP-ribosyltransferase (ART) superfamily of proteins including the poly(ADP-ribose) polymerases (PARPs) subfamily, catalyze the transfer of ADP-ribose from nicotinamide adenine dinucleotide (NAD<sup>+</sup>) onto substrate protein via N-, O-, or S-glycosidic linkages. These transferases are able to transfer a single ADP-ribose residue to their substrate proteins, in a process known as mono-ADP-ribosylation ([Bütepage et al. 2015](#)).

The anti mono-ADP-ribose antibody, clone AbD33205ad is a mono-selective ADP-ribose antibody which was generated using an H3S10ADPr peptide as the antigen. It is tagged with a SpyTag2 at the C-terminus of the Fab heavy chain, enabling the user to couple it to a [SpyCatcher reagent](#) for conversion to alternative formats in less than an hour. It has the same specificity for mono-ADPr than the human/rabbit IgG chimera antibody [HCA355](#), clone AbD33205 and recognizes Ser-mono-ADPr. Another mono-ADPr antibody ([HCA354](#), clone AbD33204) also specifically recognizes mono-ADP-ribose, however it has a preference for mono-ADP-riboses other than Ser-mono-ADPr, with a preference for ubiquitin Arg-ADPr and mono-ADPr catalyzed by other PARPs.

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20479 available at: 20479: <https://www.bio-rad-antibodies.com/uploads/MSDS/20479.pdf>

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**Regulatory** For research purposes only

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find a

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