

Datasheet: TZA021

**BATCH NUMBER 162596**

<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.

<b>Target Species</b>	Protein/peptide tag
<b>Product Form</b>	A monovalent human recombinant Fab selected from the HuCAL® phage display library and expressed in a proprietary <i>E. coli</i> 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.
<b>Preparation</b>	Recombinant Fab antibody expressed in <i>E. coli</i> and purified by affinity chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.0095% MIT
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	Total protein concentration 0.5 mg/ml
<b>Immunogen</b>	ARTKQTARKS(ADPr)TGGKAC
<b>Specificity</b>	<p><b>Anti mono-ADP-ribose antibody, clone AbD33205ad</b>, 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 (<a href="#">Bürkle 2005</a>). 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 (<a href="#">Bonfiglio et al. 2020</a>, <a href="#">Bütepage et al. 2015</a>).</p> <p>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 (<a href="#">Bütepage et al. 2015</a>).</p> <p>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 <a href="#">SpyCatcher reagent</a> 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 <a href="#">HCA355</a>, clone AbD33205 and recognizes Ser-mono-ADPr. Another mono-ADPr antibody (<a href="#">HCA354</a>, 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.</p>
<b>Storage</b>	<p>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.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA021">https://www.bio-rad-antibodies.com/SDS/TZA021</a> 20479

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